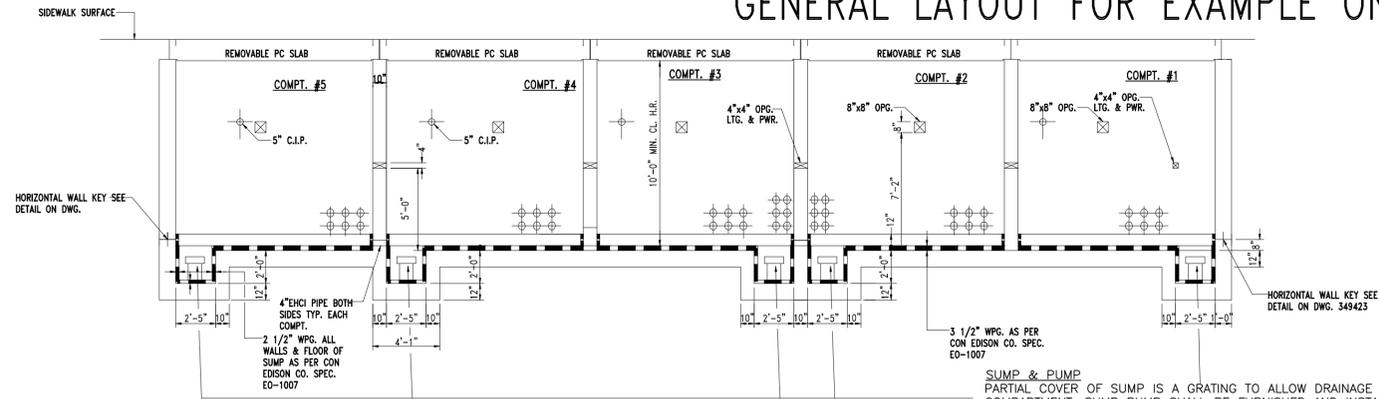
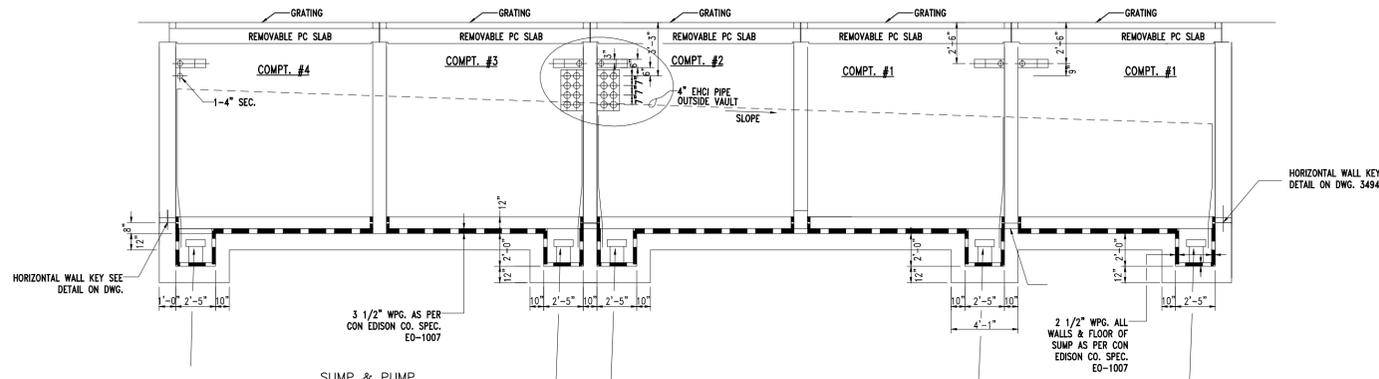
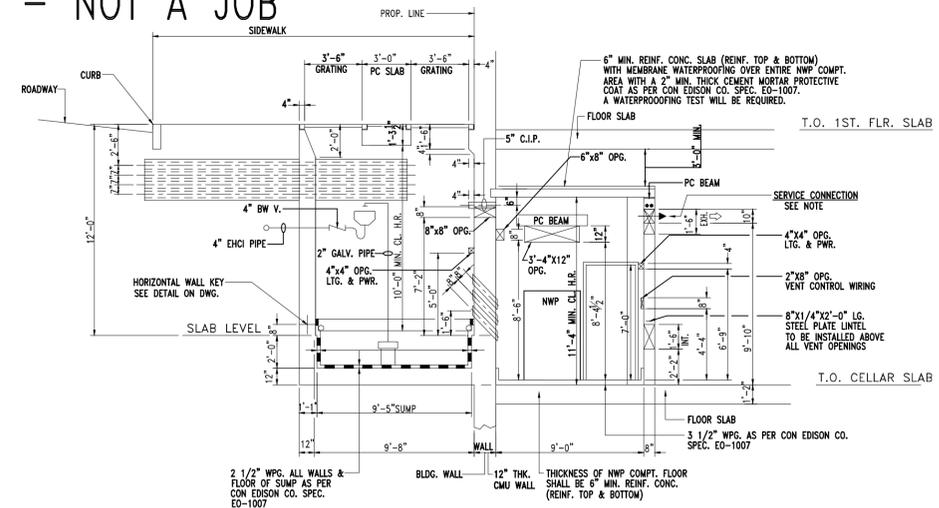


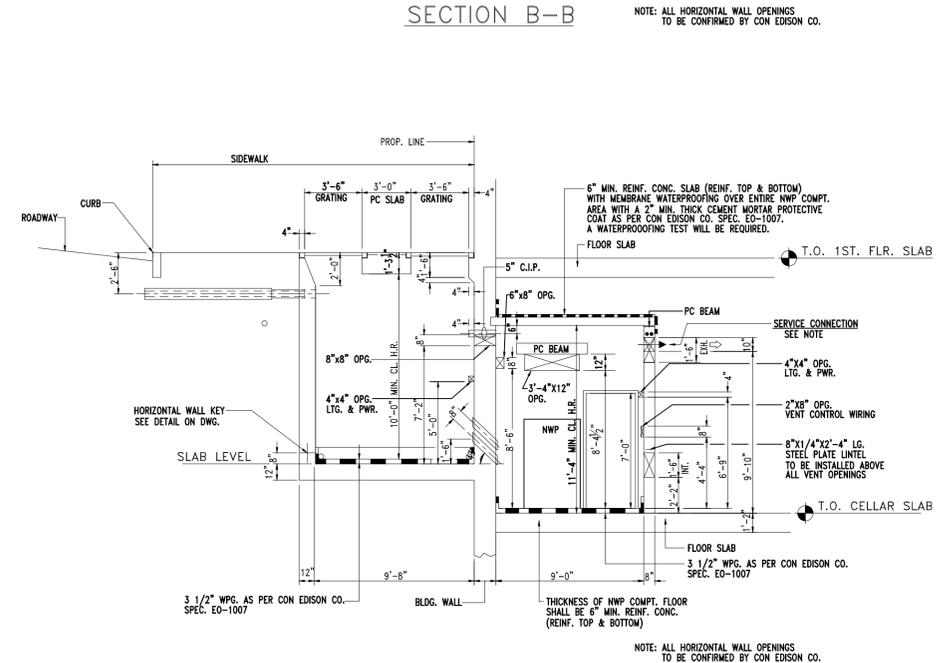
GENERAL LAYOUT FOR EXAMPLE ONLY - NOT A JOB



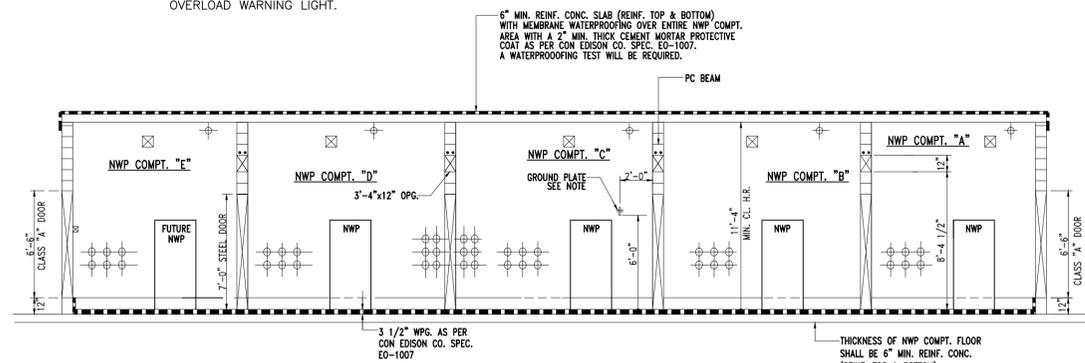
SUMP & PUMP
PARTIAL COVER OF SUMP IS A GRATING TO ALLOW DRAINAGE OF THIS COMPARTMENT. SUMP PUMP SHALL BE FURNISHED AND INSTALLED BY THE COMPANY. SUMP & PUMP WITH STANCOR OIL MINDER (MODEL O/M CON ED-2) MANUFACTURED BY STANCOR INC. 515 FAN HILL RD. MONROE, CT. 06468 TEL # (203) 268-7513 CONTROL SYSTEM TO INCLUDE N/O CONTACT AND TERMINAL BLOCK FOR REMOTE MONITORING SYSTEM OVERLOAD HEATER AND CONTACTOR AND OVERLOAD WARNING LIGHT.



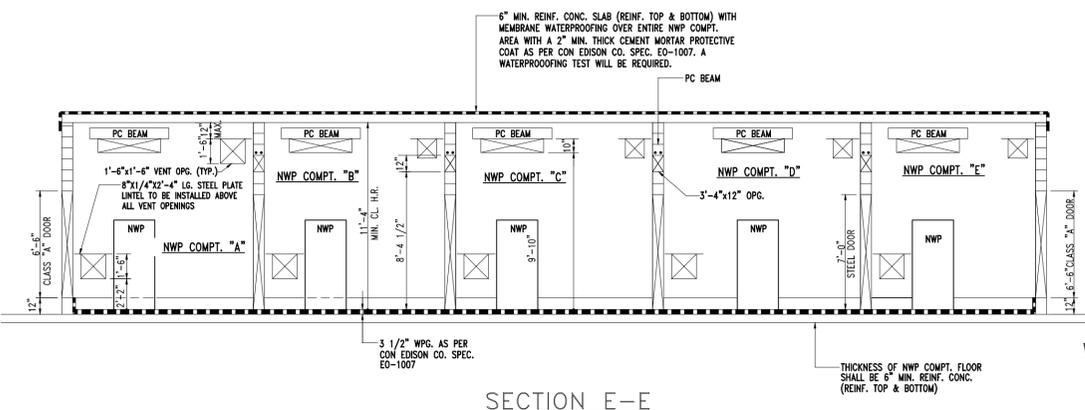
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REFERENCE DRAWINGS:
TRANSFORMER VAULT LAYOUT
SECTIONS & DETAILS



NOTE:
AS PART OF VAULT CONSTRUCTION CONTRACTOR TO INSTALL 6"x1/2" STEEL PLATE WITH 2-7/16" DIA. HOLES, 1 1/8" O.C. EXTENDED 4" INTO COMPT. WELDED TO REINFORCING BARS.
THE NUMBER OF PLATES REQUIRED DEPENDS ON THE RESISTANCE TO GROUND MEASUREMENT WHICH MUST BE TO OHMS OR LESS.



SAMPLE DRAWING

5-460-WB-SWB-TNT-S

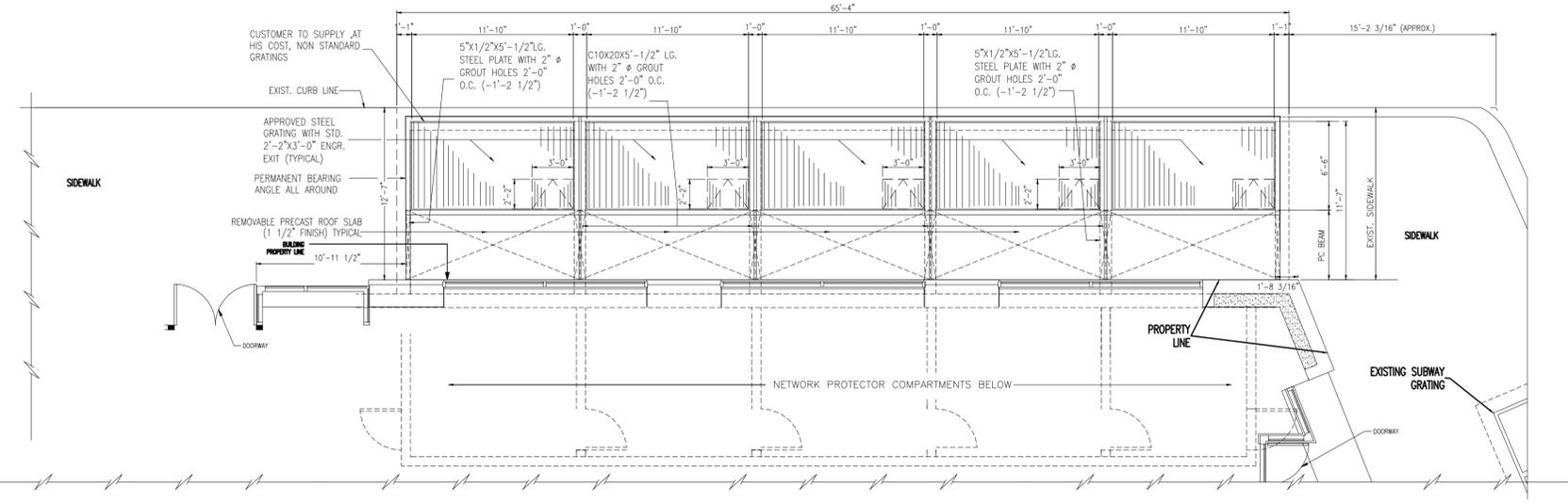
DO NOT SCALE THIS DRAWING
USE DIMENSIONS AS SHOWN
COMPUTER GENERATED DRAWING
NOT TO BE HAND REVISED

CONSOLIDATED EDISON CO. OF NEW YORK, INC.			
STREET			
MANHATTAN			
5 BAGGER WALL TAKEOFF			
TRANSFORMER VAULT LAYOUT			
SECTIONS & DETAILS		265/460V	
SCALE	NONE	DATE	RECORDED
L.A.	CHECKED	DATE	DWG.
APPROVALS	MANAGER VAULT & BUS DESIGN		
	SECTION MANAGER CUSTOMER ENGINEERING		
	MANAGER ENERGY SERVICES		
	CUSTOMER PROJECT MANAGER		
DIST ENG	FOR DEPARTMENT MANAGER DIST. EQUIP. & SUBSTA.		

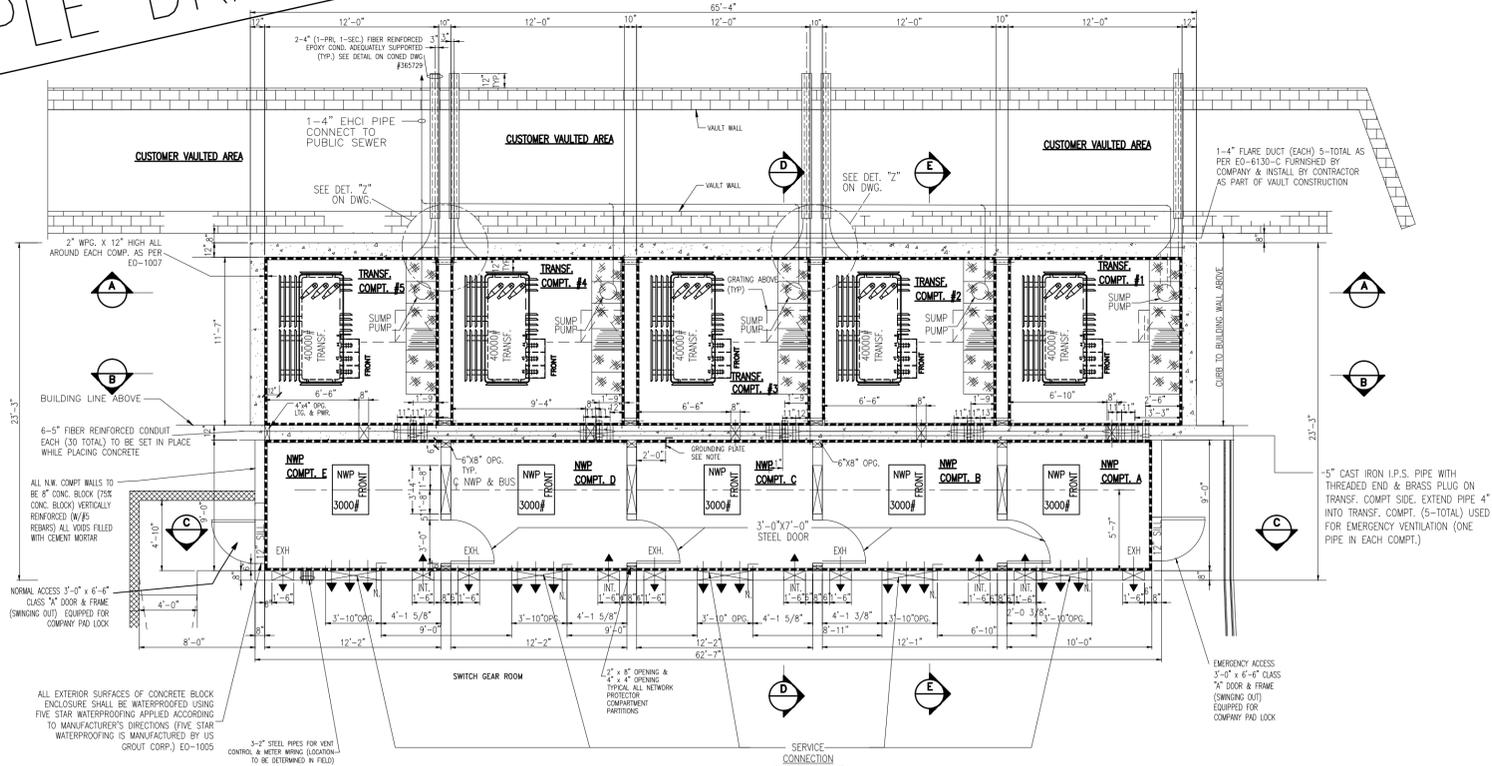
GENERAL NOTES:	
TRANSFORMER VAULTS & N.W.P. COMPARTMENTS TO BE CLEAR OF ALL FOREIGN PIPING.	
ITEMS MARKED "SEE LAYOUT", "BY CUSTOMER" OR "BY COMPANY" SHALL BE EXCLUDED BY CONTRACTOR.	
CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.	
ALL UNUSED OPENINGS AND CONDUITS TO BE SEALED.	
CUSTOMER TO REMOVE, RELOCATE, OR REDUTE AT HIS EXPENSE. ALL PIPES, CONDUITS, MATERIALS AND EQUIPMENT FROM SPACE TO BE OCCUPIED BY N.W.P. COMPT'S. AND TRANSFORMER ENCLOSURES OR INTERFERING WITH THEIR CONSTRUCTION.	
THE CUSTOMER SHALL NOT INSTALL EQUIPMENT IN THE N.W.P. COMPT'S. BEFORE WATERPROOFING AND 2" THICK CEMENT MORTAR PROTECTIVE COAT FINISH HAS BEEN INSTALLED ON ROOF SLAB OF THE COMPARTMENTS. A WATERPROOF TEST MUST BE PERFORMED AND WITNESSED BY A COMPANY-AUTHORIZED REPRESENTATIVE.	
ALL EXTERIOR DOORS OF TRANSF. & N.W.P. COMPT'S. TO BE ACCESSIBLE AT ALL TIMES AND EQUIPPED FOR COMPANY PADLOCK	
NO METAL DECKING WITHIN NETWORK COMPARTMENT AREA.	
SERVICE CONNECTION NOTES:	
CUSTOMER SHALL WIRE TO THESE SERVICE CONNECTIONS.	
CAPACITY OF ANY ONE SERVICE CONNECTION IS LIMITED 3,000 AMPERES PER PHASE PER 1/2 HOUR DEMAND.	
CAPACITY OF INSTALLATION IS LIMITED TO 12,100 AMPERES PER PHASE PER 1/2 HOUR DEMAND.	
THE COMPANY'S RATE SCHEDULE PROVIDES THAT THE CUSTOMER SHALL GIVE THE COMPANY REASONABLE ADVANCE NOTICE OF INTENTION MATERIALLY TO INCREASE HIS LOAD IN THE FUTURE SO THAT ADEQUATE FACILITIES MAY BE PROVIDED.	
VENTILATION RATIO: COMPT. 1	
VOLUME OF VAULT-CU. FT. = 1728	34
NET VENT GRATING-SQ. FT. = 52	1
EQUIPMENT: (TO BE FURNISHED AND INSTALLED BY COMPANY)	
-2500 KVA - 13.8KV 3Ø 277/480V TRANSFORMERS	
-2500KVA 277/480V NWP & FRAMES	
PLUMBING MATERIAL	
DRAIN FUNNEL	
4" E.H.C.I. PIPE	
2" GALVANIZED PIPE	
4" CHECK VALVE	
4" PIPE TRAP I.S. SIMMONS	
SP216 OR EQUAL	
SEE EO-17079-B FOR ADDITIONAL MATERIAL	
REFERENCE DRAWINGS	
3'-0"x6'-6" FRAME (METHOD #2)	EO-16447-A
3'-0"x6'-6" CLASS "A" DOOR	EO-16448-A
3'-0"x7'-0" FRAME (METHOD #4)	EO-16447-A
3'-0"x7'-0" STEEL DOOR	EO-16448-A
LATCHING INSTALLATION & DETAILS	EO-16450-A
HINGE STRAP & PINTEL	EO-2032
FORCED VENTILATION & ALARM SYSTEM (EO-7557-C) SPEC.	EO-100,205
WATERSTOP PURCH. SPEC.	EO-6217-C
METHOD OF SEALING CONDUIT & CABLE	EO-1191
PAINTING OF N.W.P. COMPT'S. SPEC.	EO-100,167
CEMENT MORTAR SPEC.	EO-100,023
MASTIC COMPOUND SPEC.	EO-12160-C
INSTALLATION OF SUMP PUMP	EO-12086-C
SUMP FRAME & COVER	EO-1007
WATERPROOFING SPEC.	EO-1042
FLARED DUCT(EO-6130-C) SPEC.	EO-100,628
FIBER REINFORCED EPOXY CONDUIT PURCH. SPEC.	EO-16979-B
BACK PRESSURE DAMPER	EO-100,184
PAINT FOR N.W.P. COMPT'S. PURCH. SPEC.	EO-11320
WELDING SPEC.	EO-16972-B
VAULT DRAINAGE	EO-13712-B
LIGHT & POWER OUTLET WIRING	
WIRING DIAGRAM	x
NWP INSTALL	x

FOLDER 5646

SAMPLE DRAWING



SIDEWALK PLAN
LL=600#/SQ.FT.
SCALE: NTS



TRANSFORMER VAULT PLAN
SCALE: NTS

COMPUTER GENERATED DRAWING NOT TO BE HAND REVISED
DO NOT SCALE THIS DWG. USE DIMENSIONS AS SHOWN

REFERENCE DWGS:

PLAN	_____
SECTIONS	_____
DIVISION OF RESPONSIBILITY	_____
REINFORCEMENT DRAWING	_____

PLOT PLAN

CONTRACTOR SHALL SUBMIT STRUCTURAL STEEL AND CONCRETE WALL SHOP DRAWINGS FOR CON EDISON REVIEW AND APPROVAL.

TRANSFORMER VAULTS TO BE ACCESSIBLE AT ALL TIMES.

NOTE 1

- CUSTOMER TO SUBMIT TO THE COMPANY THE FOLLOWING VENTILATION INFORMATION:
 - LOCATION OF THE VENTILATION CONTROLS INDICATE WHICH TAKE-OFF IS SOURCE OF SUPPLY.
 - SUPERVISORY PERSONNEL TO CONTACT DURING NORMAL WORKING HOURS AND NON-WORKING FOR EMERGENCIES.
- CUSTOMER SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY FUTURE WATER OR MOISTURE PROBLEMS THROUGH WALLS, CONDUITS, CEILING OR FLOOR IN N.W.P. COMPARTMENT SHOULD THEY OCCUR. ANY CORRECTIVE METHODS ARE TO BE COMPLETED IN ACCORDANCE WITH ESTABLISHED COMPANY METHODS AND UNDER THE DIRECTION OF THE COMPANY REPRESENTATIVE.
- THE WATERSTOP SHALL BE INSTALLED IN ALL CONSTRUCTION JOINTS IN TRANSF. COMPARTMENTS AREA.
- CUSTOMER TO PROVIDE AND MAINTAIN A 4'-0" MINIMUM CLEAR PASSAGEWAY WITHIN BLDG. FOR THE INSTALLATION AND REPLACEMENT OF EQUIPMENT.
- NO METAL DECKING WITHIN THE NETWORK COMPARTMENT AREA.
- ALL FORMS AND BRACING USED IN CONSTRUCTION OF VAULT TO BE REMOVED BY VAULT CONTRACTOR UNLESS OTHERWISE NOTED.
- CUSTOMER TO FURNISH A METHOD OF CONNECTING NEUTRAL BUS TO BUILDING STEEL WITHIN N.W.P. PROTECTOR COMPARTMENT. THE NUMBER OF PLATES REQUIRED DEPEND ON THE RESISTANCE TO GROUND MEASUREMENT WHICH MUST BE 10 OHMS OR LESS.

NO FORM TIES ALLOWED

THE CONTRACTOR SHALL SUBMIT CONCRETE MIX AND REINFORCEMENT SHOP DRAWINGS FOR CON EDISON REVIEW AND APPROVAL.

NETWORK PROTECTOR COMPT.

- ONE OUTSIDE DOOR OF THE NETWORK PROTECTOR COMPARTMENT SHALL BE OPEN TO A PUBLIC AREA. OTHER OUTSIDE DOOR MUST BE ACCESSIBLE AT ALL TIMES. AS PART OF VAULT CONSTRUCTION THE FLOORS, WALLS AND CEILINGS ARE TO BE PAINTED IN ACCORDANCE WITH SPEC. EO-1191. AFTER EQUIPMENT HAS BEEN INSTALLED, THE COMPANY IS TO REPAIR DAMAGED FLOORS, WALLS AND CEILING PAINT. IN ACCORDANCE WITH SPEC. EO-1191.
- CUSTOMER & CONTRACTOR TO PROVIDE CONDUIT OPENING IN WALLS OR FLOOR AS SHOWN. REINFORCING BARS SHALL CLEAR ALL CONDUIT OPENINGS BY 4" MINIMUM ON ALL SIDES. OMIT BARS WITHIN OPENINGS.
- FLANGES OF ALL STEEL BEAMS SHALL CLEAR SERVICE CONNECTION OPENINGS BY 8" MINIMUM.
- REINFORCING BARS SHALL CLEAR PARALLEL BUS OPENINGS AND SERVICE CONNECTION OPENINGS BY 4" MINIMUM ON ALL SIDES.
- ALL BUILDING STEEL IN NETWORK PROTECTOR COMPARTMENT SHALL BE ENCASED IN A MINIMUM 2" CONCRETE PROTECTION BY CUSTOMER.
- CUSTOMER SHALL REMOVE ALL CONCRETE FORMS IN NETWORK PROTECTOR COMPARTMENT AREA PRIOR TO CONSTRUCTION BY OTHERS.

NOTE:

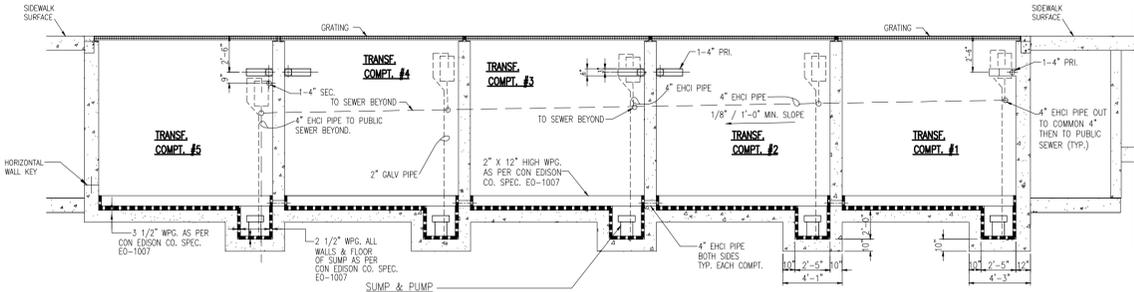
THE SEWER CONNECTION TO BE LOCATED ACCORDINGLY.

GROUNDING PLATE NOTE:

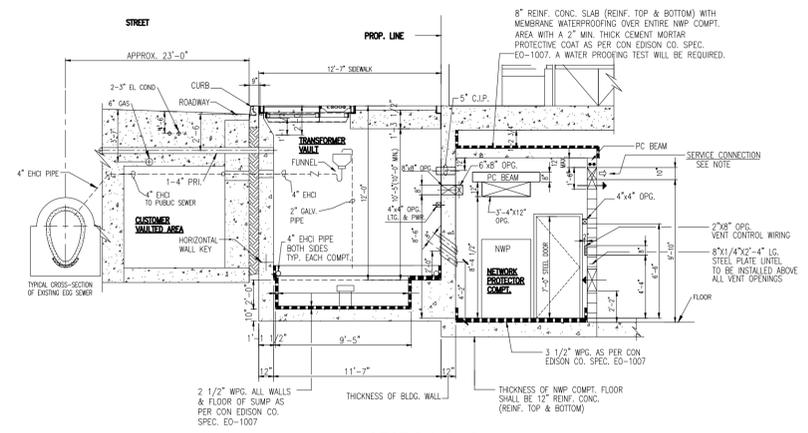
AS PART OF VAULT CONSTRUCTION CONTRACTOR TO INSTALL 6"x12" STEEL PLATE WITH 2"-7/16" DIA. HOLES 1 1/8" O.C. EXTENDED 4" INTO COMPT. WELDED TO BUILDING STEEL BEAM. THE NUMBER OF PLATES REQUIRED DEPENDS ON THE RESISTANCE TO GROUND MEASUREMENT WHICH MUST BE 10 OHMS OR LESS.

5-460-WB-SWC-TNT-P CONSOLIDATED EDISON CO. OF NEW YORK, INC.

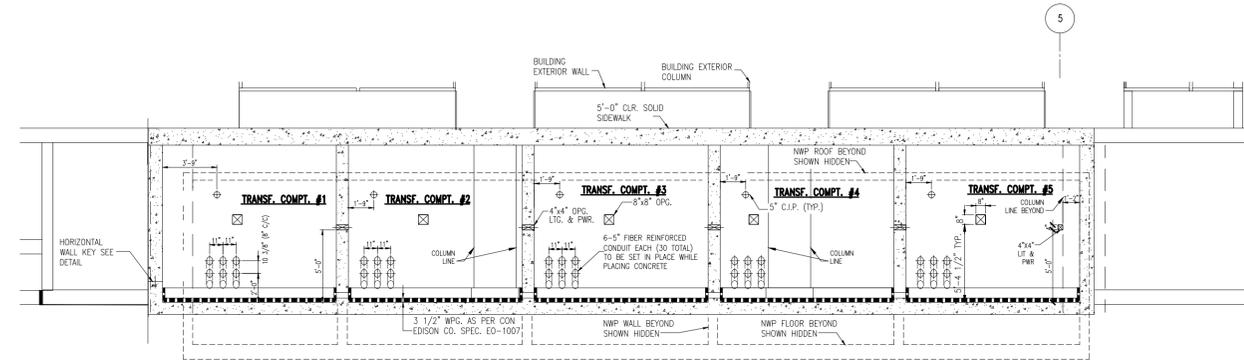
MANHATTAN	
TRANSFORMER VAULT LAYOUT	
UNDER SIDEWALK INSTALLATION 265/480V	
SCALE	NTS
DATE	10/20/11
BY	EDISON
CHECKED	EDISON
APPROVALS	
MANHATTAN ENERGY SERVICES	MANAGER VAULT & BUS DESIGN
	DEPARTMENT MANAGER CUSTOMER ENGINEERING
	MANAGER ENERGY SERVICES
	CUSTOMER PROJECT MANAGER
DIST. ENG.	FOR DEPARTMENT MANAGER DIST. EQUIP. & SUBSTA.



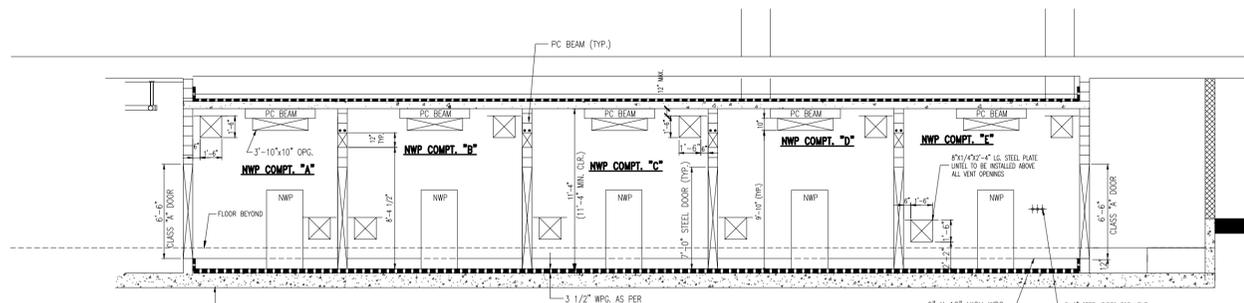
SECTION A-A
SCALE: NTS



SECTION D-D
SCALE: NTS

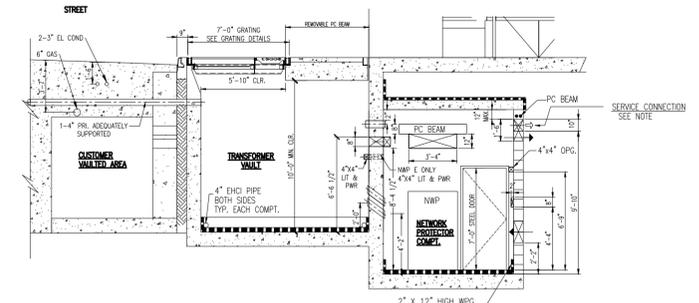


SECTION B-B
SCALE: NTS



SECTION C-C
SCALE: NTS

SAMPLE DRAWING



SECTION E-E
SCALE: NTS

NOTE: SEE SECTION "D-D" ABOVE FOR MORE DETAILS

5-460-WB-SWC-TNT-S

CONSOLIDATED EDISON CO.
OF NEW YORK, INC.

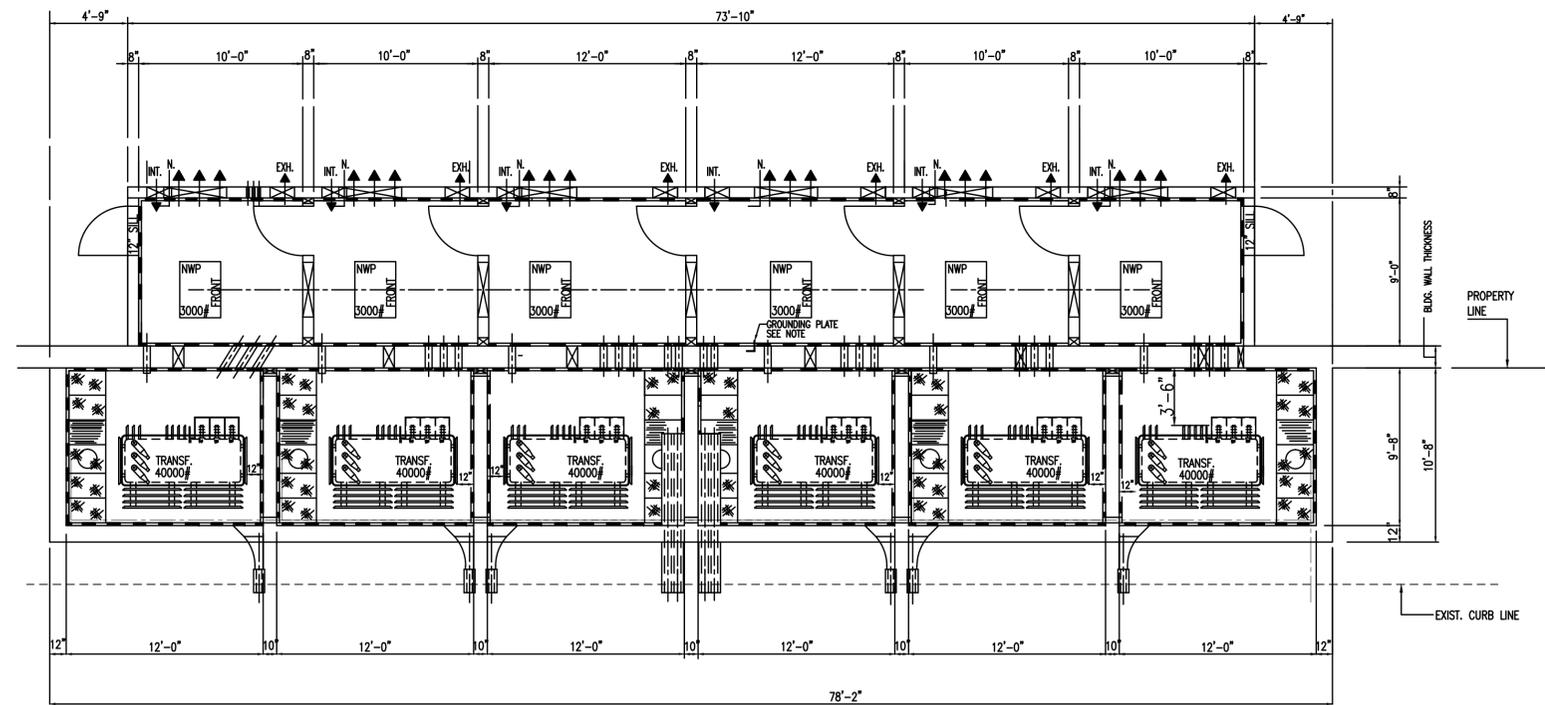
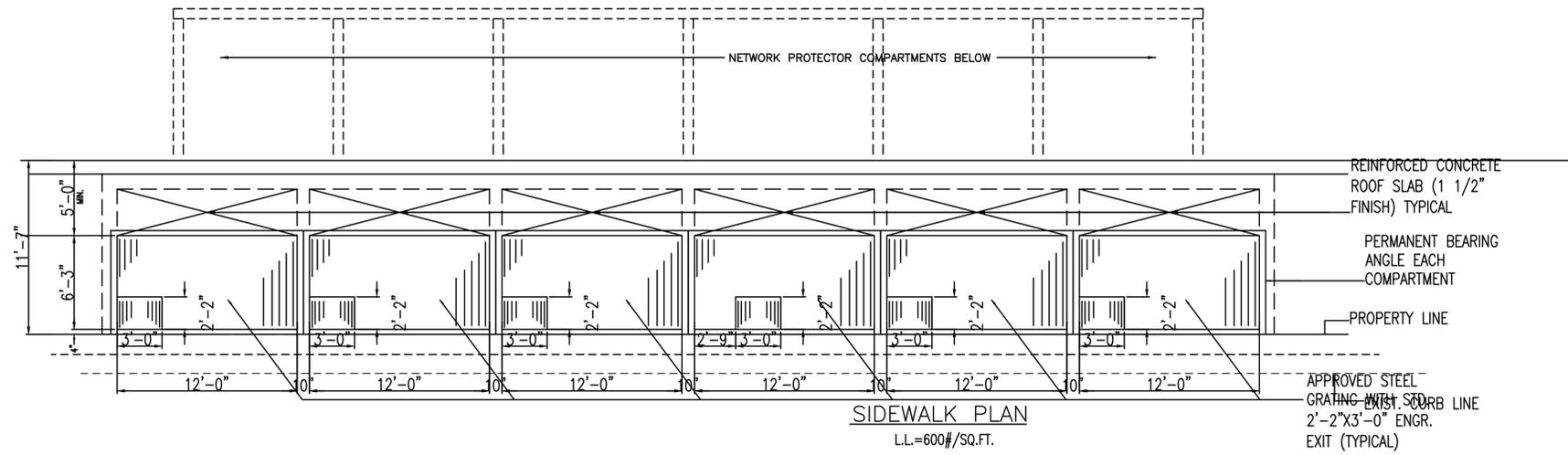
MANHATTAN	
TRANSFORMER VAULT SECTIONS UNDER SIDEWALK INSTALLATION 265/480V	
SCALE: NTS	DATE: 08/11/11
DESIGNED: [Signature]	CHECKED: [Signature]
MANHATTAN ENERGY SERVICES MANAGER VAULT & BUS DESIGN	DEPARTMENT MANAGER CUSTOMER ENGINEERING
MANAGER ENERGY SERVICES	CUSTOMER PROJECT MANAGER
DESIGNED: [Signature]	FOR DEPARTMENT MANAGER DIST. EQUIP. & SUBSTA.

COMPUTER GENERATED DRAWING NOT TO BE HAND REVISED
DO NOT SCALE THIS DWG., USE DIMENSIONS AS SHOWN

REFERENCE DWGS:

PLAN	_____
DETAILS	_____
DIVISION OF RESPONSIBILITY	_____

SAMPLE DRAWING



6-460-WB-SWC-TNT-Pa

CONSOLIDATED EDISON CO. OF NEW YORK, INC.

MANHATTAN

UNDER SIDEWALK 265/460V

SCALE	NONE	DATE	RECORDED
L.A.	CHECKED	BY	DATE

APPROVALS	MANH ENG	MANAGER VAULT & BUS DESIGN
		MANAGER ENERGY SERVICES
		DIST. ENGR
		FIELD ENGR
	DIST. ENG	DIST. EQUIP. ENGR