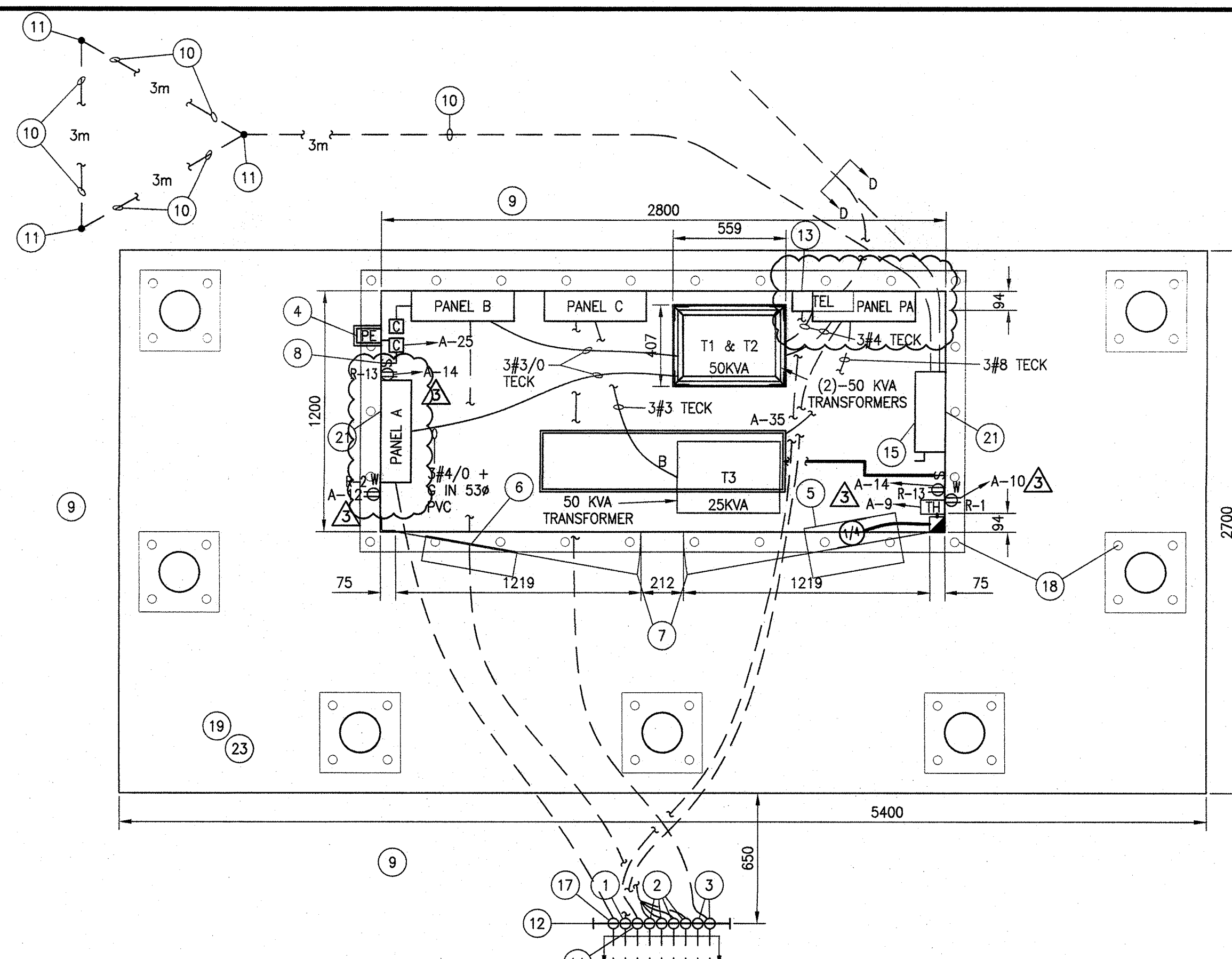


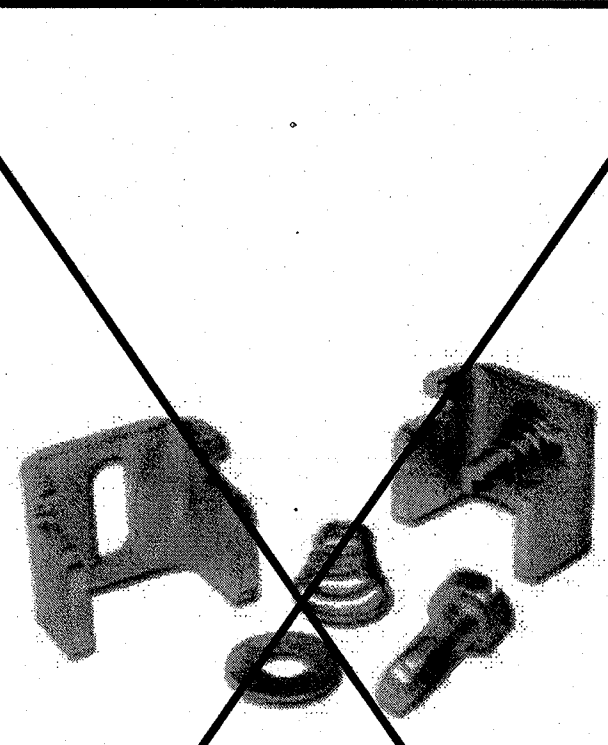
1 NEW ELECTRICAL SERVICE ENCLOSURE ES-1 EXTERIOR ELEVATIONS
SCALE 1:20



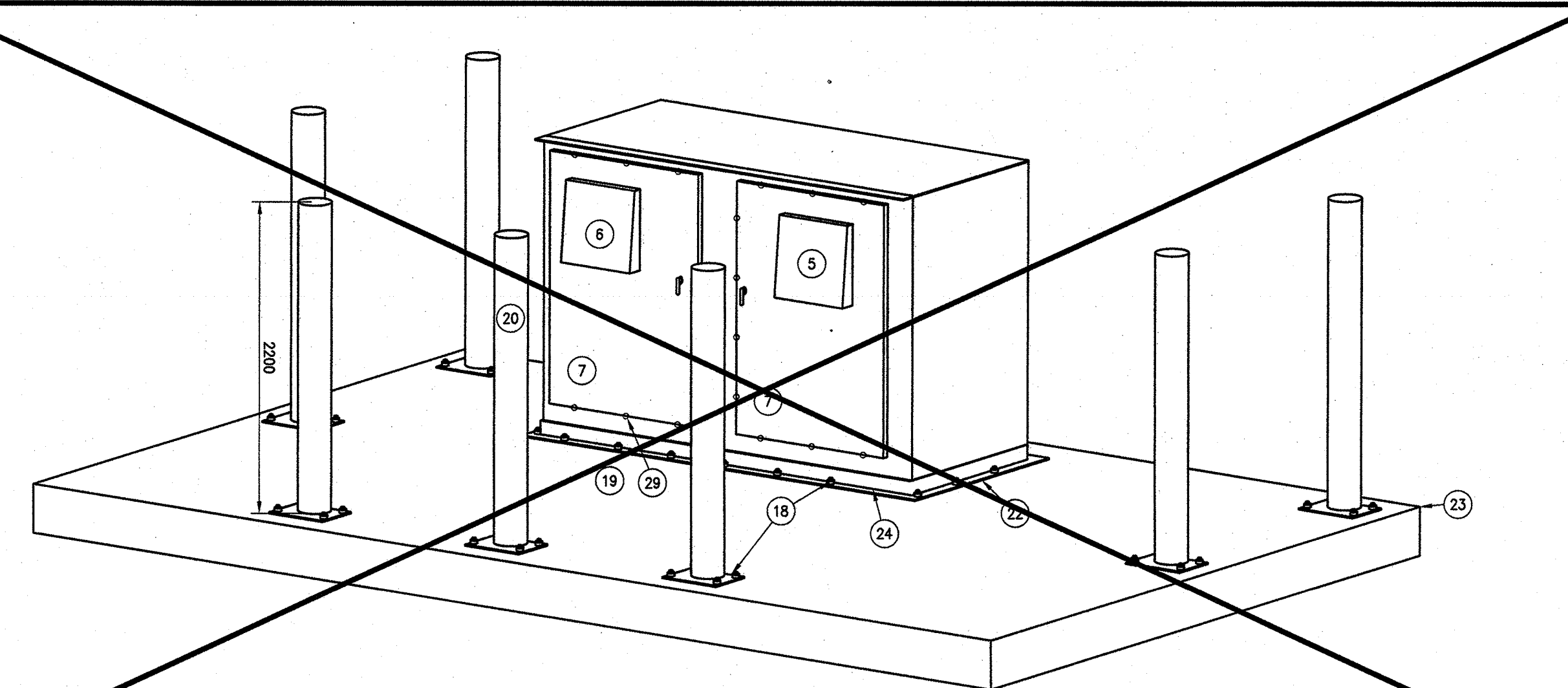
2 NEW ELECTRICAL SERVICE ENCLOSURE ES-1 PLAN VIEW
SCALE 1:20

RECEPT.	RATING	VOLTS	CIRCUIT	RATED CURRENT	DISTANCE METERS	VOLTAGE DROP	WIRE SIZE
R1	15	120V	A-1	12A	5	<3%	2#12
R2	15	120V	A-3	12A	1	<3%	2#12
R3	20	120V	B-1	16A	20	<3%	2#12
R4	20	120V	B-3	16A	20	<3%	2#12
R5	20	120V	B-5	16A	60	<3%	2#8
R6	20	120V	B-7	16A	60	<3%	2#8
R7	20	120V	C-2	16A	106	<3%	2#6
R8	20	120V	C-4	16A	106	<3%	2#6
R9	20	120V	C-6	16A	165	<3%	2#4
R10	20	120V	C-8	16A	165	<3%	2#4
R11	20	120V	C-10	16A	220	<3%	2#4
R12	20	120V	C-12	16A	220	<3%	2#4
R13	15	120V	A-9	12A	5	<3%	2#12
R14	20	120V	A-6	16A	90	<3%	2#4
R15	20	120V	A-8	16A	90	<3%	2#4
R16	20	120V	A-14	16A	55	<3%	2#6
R17	20	120V	A-16	16A	55	<3%	2#6
W1	50	240V	A-5,7	40A	5	<3%	3#8
W2	50	240V	A-10,12	40A	55	<3%	3#4
BW1	50	240V	B-2,11	40A	20	<3%	3#8
BW2	50	240V	B-13,15	40A	60	<3%	3#3
WINCH	60	600V	PA-1,3,5	48A	45	<3%	4#4
LIGHT POLE L6	15	120V	A-2,4	8A	100	<3%	5#6
LIGHT POLE L7	15	120V	A-10,12	8A	60	<3%	5#10
LIGHT POLE L8	15	120V	B-12,14	8A	25	<3%	5#10
LIGHT POLE L9	15	120V	B-16,18	8A	65	<3%	5#8
LIGHT POLE L10	15	120V	C-1,3	8A	112	<3%	5#6
LIGHT POLE L11	15	120V	C-5,7	8A	170	<3%	3#4
LIGHT POLE L12	15	120V	C-9,11	8A	225	<3%	5#4

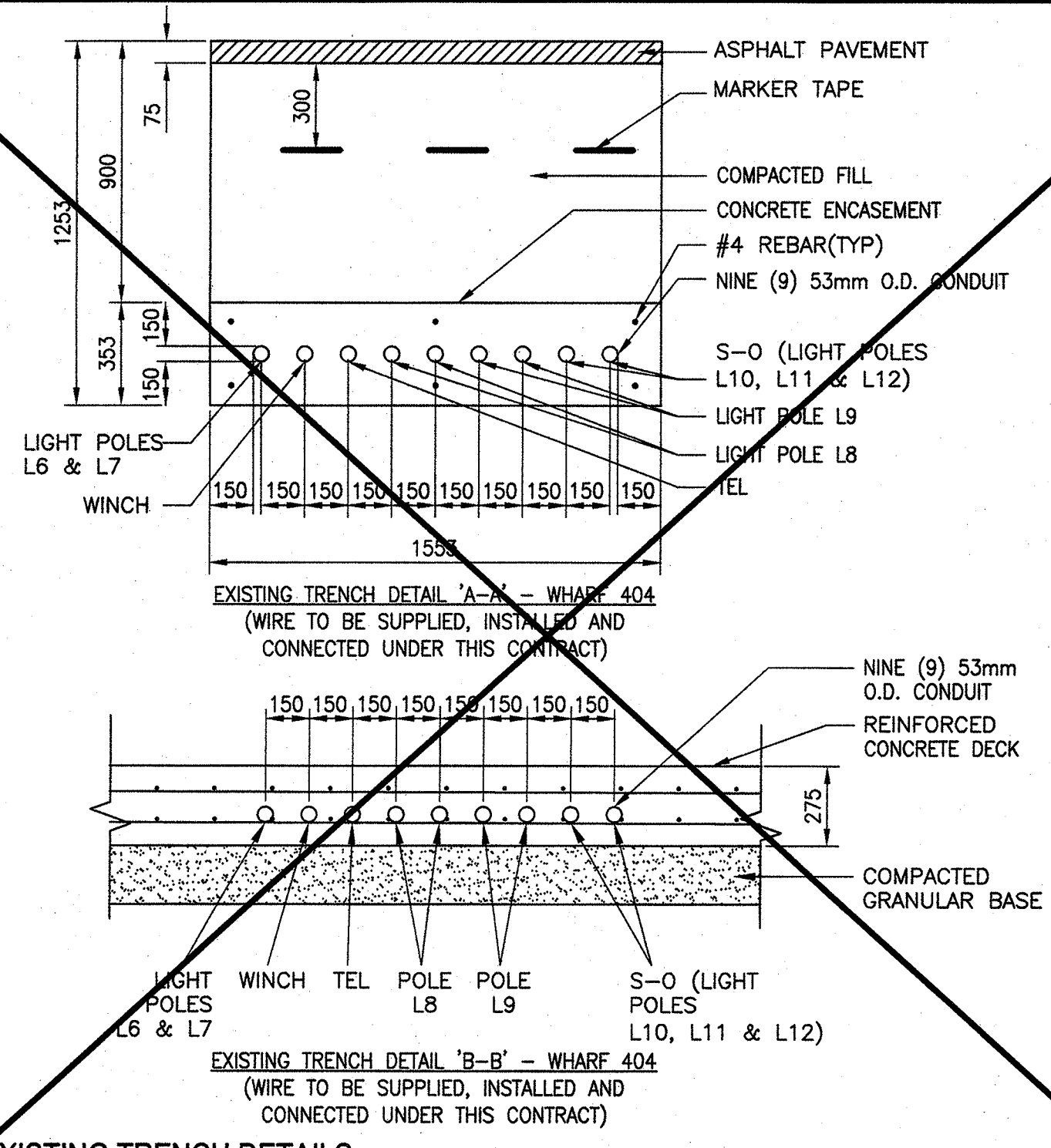
3 VOLTAGE DROP CALCULATIONS FOR ELECTRICAL SERVICE ENCLOSURE ES-1
SCALE N.T.S.



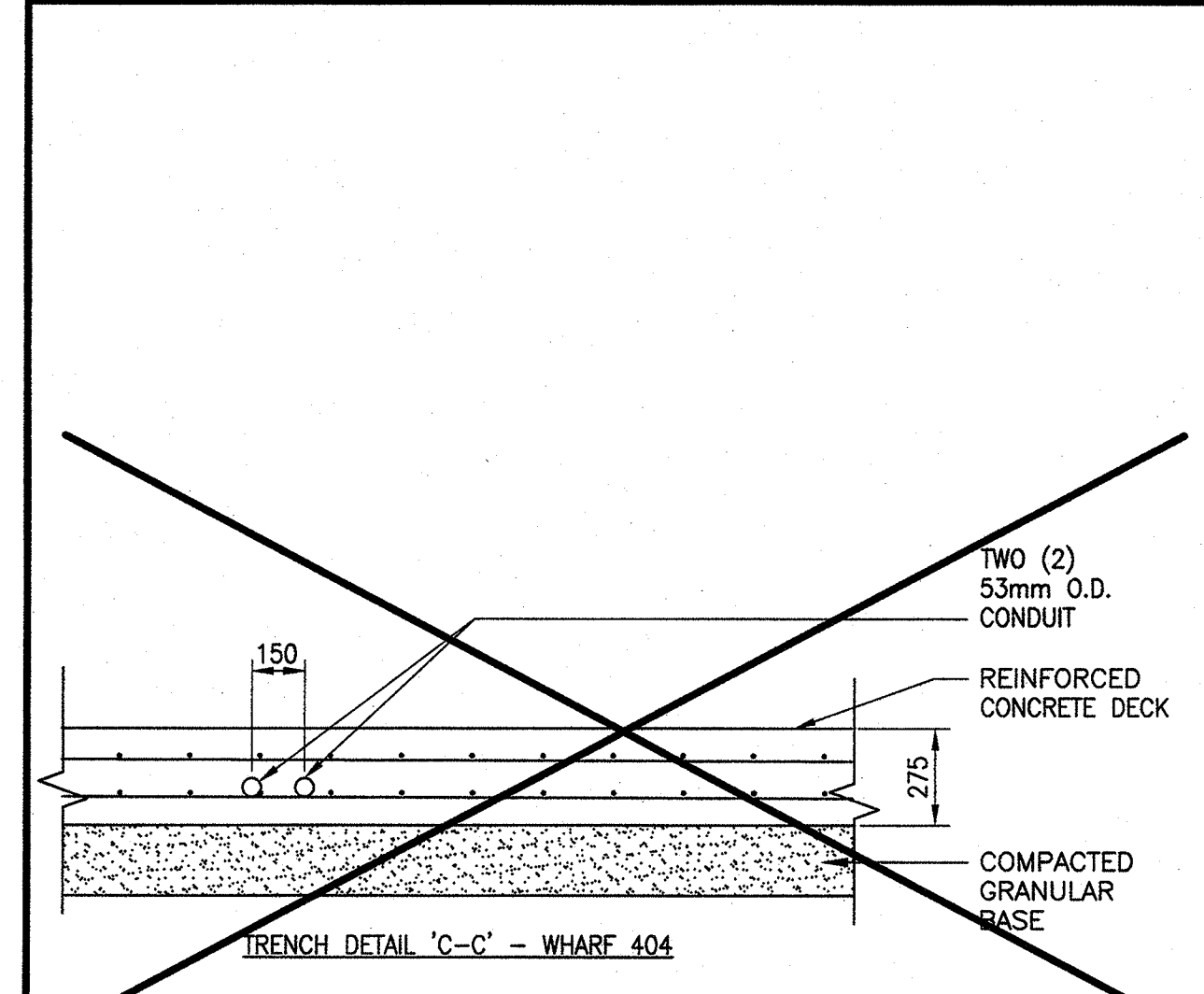
4 HEAVY DUTY DOOR CLAMPING HARDWARE
SCALE 1:20



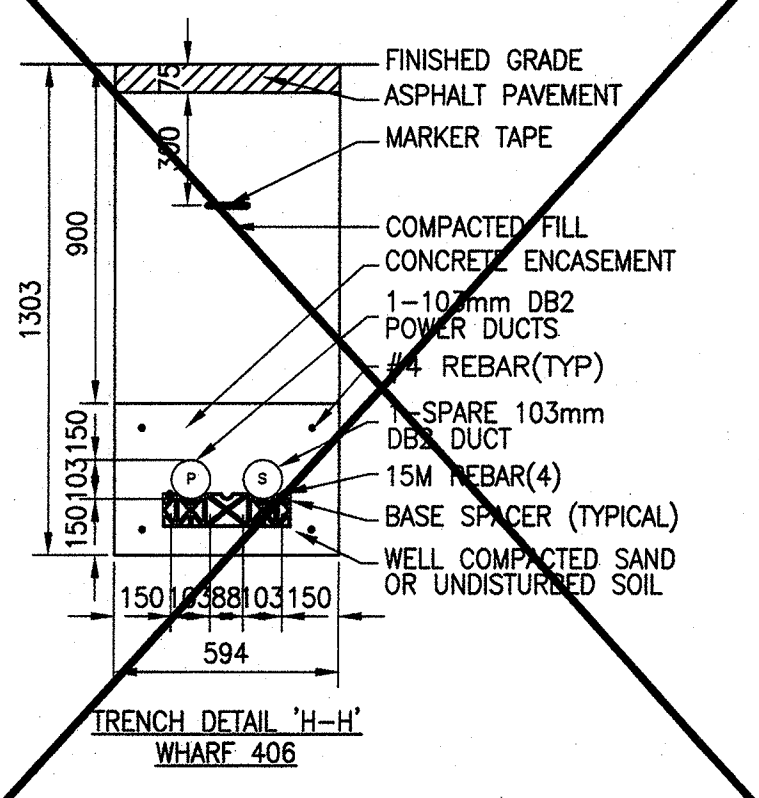
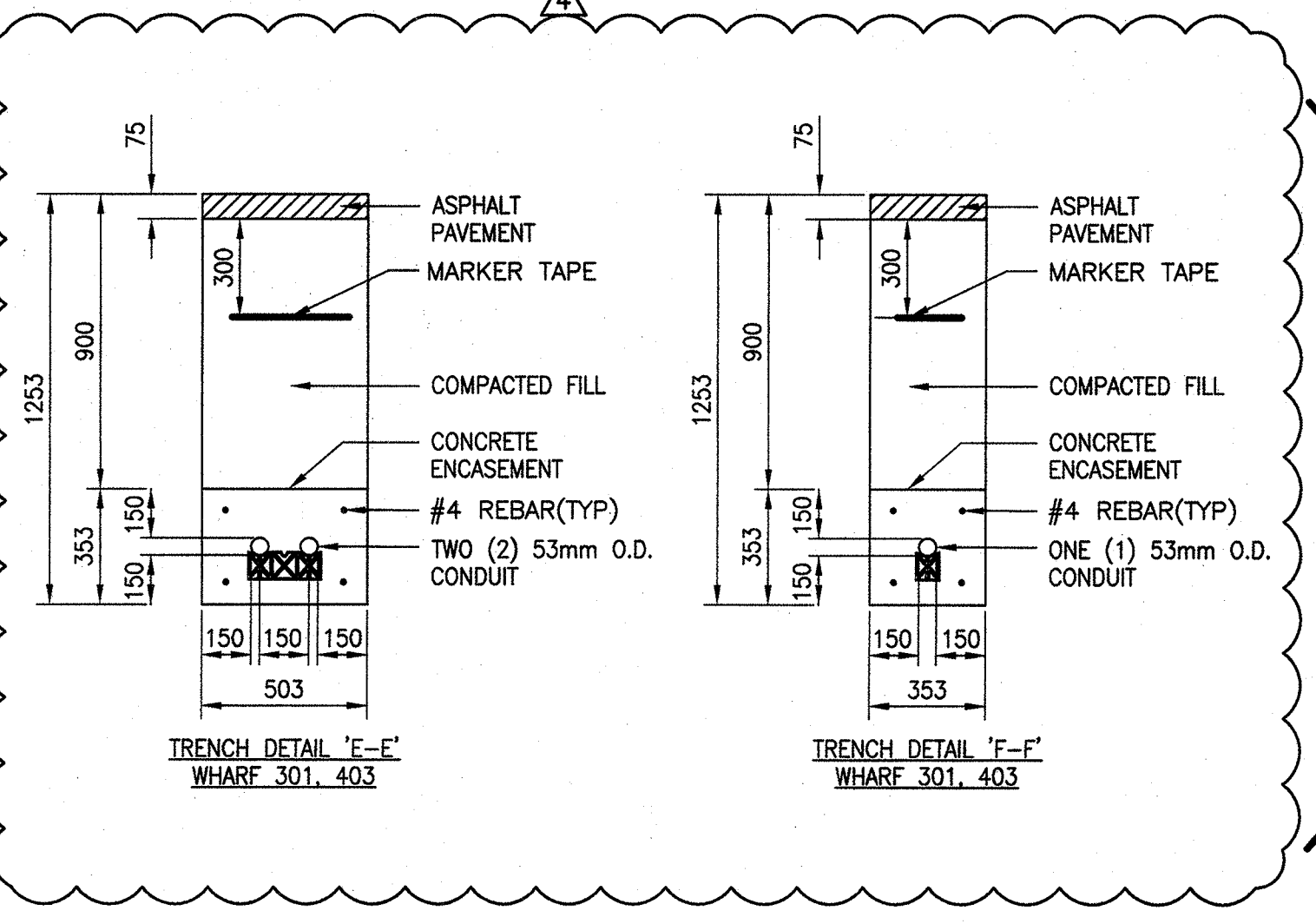
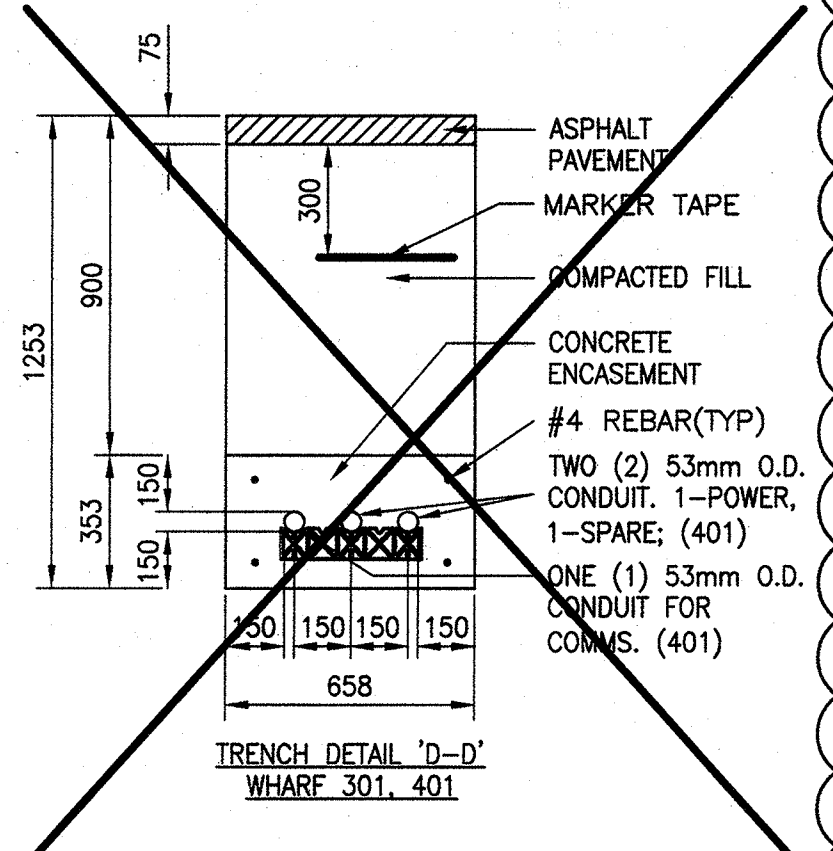
5 NEW ELECTRICAL SERVICE ENCLOSURE ES-1 EXTERIOR ELEVATIONS
SCALE N.T.S.



6 EXISTING TRENCH DETAILS (WHARF 404)
SCALE 1:20



7 NEW TRENCH DETAILS (WHARFS 301, 403, 404, 406)
SCALE 1:20



SCALE 1:20

- NOTES
- EXISTING NOTED DUCTS TO BE EXTENDED UNDER SLAB TO PANEL 'PA' FOR EXTERIOR 60A, 600V, 3#, DISCONNECT FUSED AT 50A FOR WINCH.
 - EXISTING NOTED DUCTS TO BE EXTENDED UNDER SLAB TO PANEL 'B' FOR POLES 6 AND 9.
 - EXISTING NOTED DUCTS TO BE EXTENDED UNDER SLAB TO PANEL 'C' FOR SHROUD S-0.
 - PHOTOCELL C/W ALUMINUM ENCLOSURE AND WIRED BACK TO LIGHTING CONTACTOR.
 - INTAKE LOUVER AND FAN.
 - EXHAUST LOUVER.
 - ENCLOSURE DOORS - 3mm THICK.
 - BYPASS SWITCH TO BE WIRED IN PARALLEL WITH PHOTOCELL TO LIGHTING CONTACTOR.
 - CONTRACTOR TO REPAIR ALL AREAS DAMAGED BY WORK TO MATCH EXISTING CONDITIONS INCLUDING REPAIRING, RE-SOILING, ETC. AS REQUIRED.
 - NEW 1/2" R90 GND. IN 27mm PVC ABOVE AND BELOW GROUND WITH 27mm EMT INDOORS.
 - NEW 21mm DIA. x 3m LONG COPPER GROUND RODS WITH TOP 1m BELOW GROUND DRIVEN VERTICALLY OR LAID HORIZONTALLY IN TRENCH CONNECTED BY #3 RW90 GND WIRE.
 - EXISTING CONDUIT BANK.
 - 300 x 300 x 150mm PVC JUNCTION BOX FOR TERMINATING CAT.5e TEL. CABLE.
 - EXISTING NOTED DUCT TO BE EXTENDED TO TELEPHONE JUNCTION BOX C/W 2-CAT.5e CABLES.
 - 200A 347/600V 3#, 4W FUSIBLE DISCONNECT.
 - 150mm X 300mm ALUMINUM SECTION EXTENDING 300mm ABOVE ENCLOSURE BOTTOM BELOW EACH PANEL/DISCONNECT FOR PVC CONDUIT ENTRY INTO ENCLOSURE WELDED TO BOTTOM OF ENCLOSURE.
 - EXISTING NOTED DUCT TO BE EXTENDED UNDER SLAB TO PANEL 'A' FOR 53mm CONDUIT WITH RW90 WIRES FOR LIGHT POLES L6 AND L7.
 - ANCHOR BOLTS (4-16mm DIA. GALVANIZED ADHESIVE ANCHORS, EMBEDDED 200mm MINIMUM INTO HOLES DRILLED INTO CONCRETE).
 - NEW CONCRETE BASE.
 - SUPPLY AND INSTALL 200mm DIA. GALVANIZED SCHEDULE 40 STEEL PIPE FILLED WITH CONCRETE AND CAPED, PAINTED YELLOW WITH 13mm THICK GALVANIZED BASE PLATE C/W ANCHOR BOLTS.
 - 20mm DIAMETER STAINLESS STEEL DRAIN PLUG AT EACH END OF THE ENCLOSURE.
 - 13mm RUBBER PAD UNDER ENTIRE AREA OF ES-1.
 - TOP OF CONCRETE TO BE 600mm ABOVE WHARF ELEVATION. PROVIDE CRUSHED ROCK TO RAISE ELEVATION.
 - ENCLOSURE BASE PLATE.
 - ENCLOSURE - 3mm THICK WITH DULL FINISH.
 - STIFFENER - 6mm THICK x 25mm ANGLE MOUNTED EVERY 300mm VERTICALLY AROUND INTERIOR PERIMETER OF ENCLOSURE.
 - ALUMINUM STRUT (1.625 x 0.812mm).
 - ALL ELECTRICAL EQUIPMENT AND DEVICES MOUNTED ON STIFFENERS INSIDE ENCLOSURE.
 - HEAVY DUTY DOOR CLAMPING HARDWARE - HAMMOND MANUFACTURING PART NO. 1481HC18 (DETAIL 4).

4	WHARF 403 ELECTRICAL UPGRADE	2015.03.31
5	AS-BUILT	2014.12.19
6	WIRING CHANGES BETWEEN PANELS PA, A, B, C AND TRANSFORMERS T1, T2, T3	2014.02.05
7	ISSUED FOR TENDER	2013.10.18
revisions	description	date

project
RECONSTRUCTION OF STRUCTURE 403 PUBLIC WHARF MISCOU
NEW BRUNSWICK

drawing
NEW ELECTRICAL SERVICE ENCLOSURE ES-1 WHARF 301, 403, 404, 406 LAYOUTS & DETAILS

designed RALPH SMITH, P.ENG
date 2015.03.31
drawn JODI PARKER
date 2015.03.31
approved RALPH SMITH, P.ENG
date 2015.03.31
Tender PWSC Project Manager Administrateur de projets TPSGC
project number R.073265.001
drawing no. E5 of E6