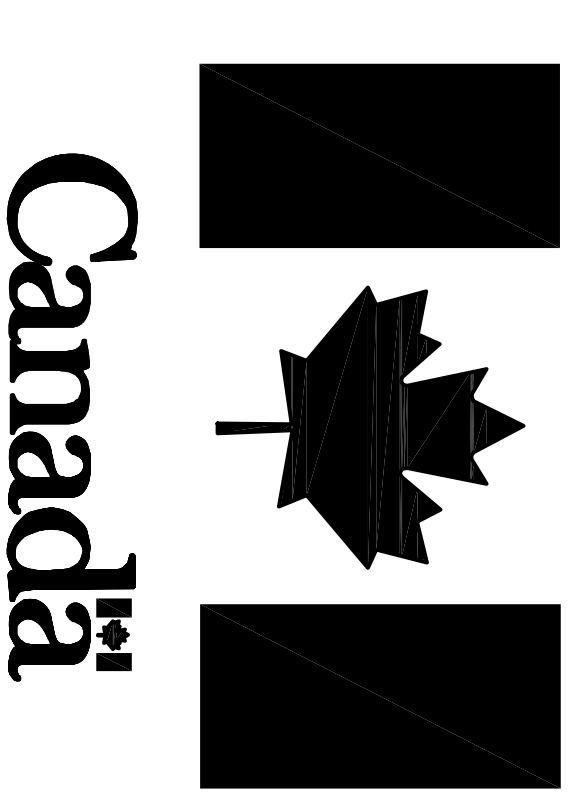


FISHERIES AND OCEANS



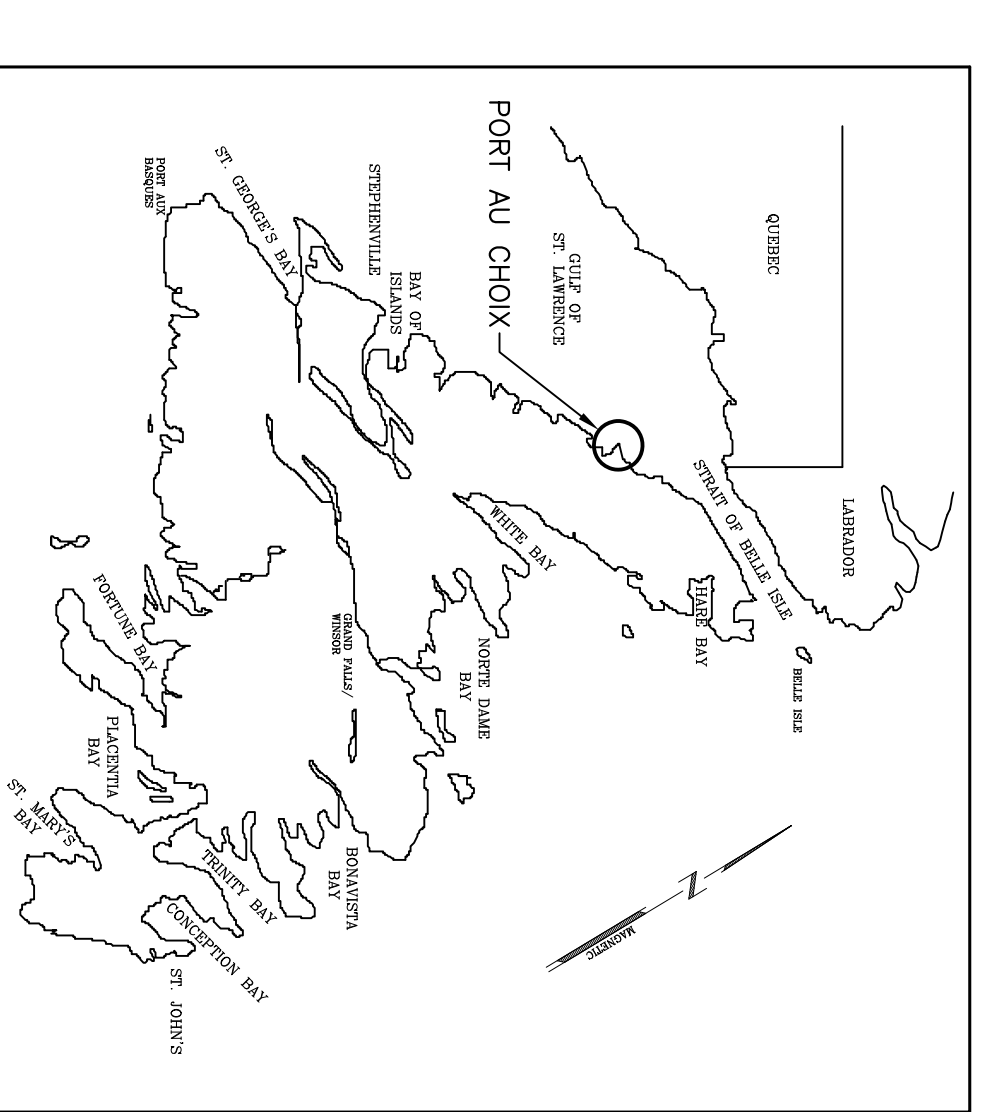
EMERGENCY GENERATOR SYSTEM FOR SEARCH AND RESCUE STATION

PORT AU CHOIX, NL

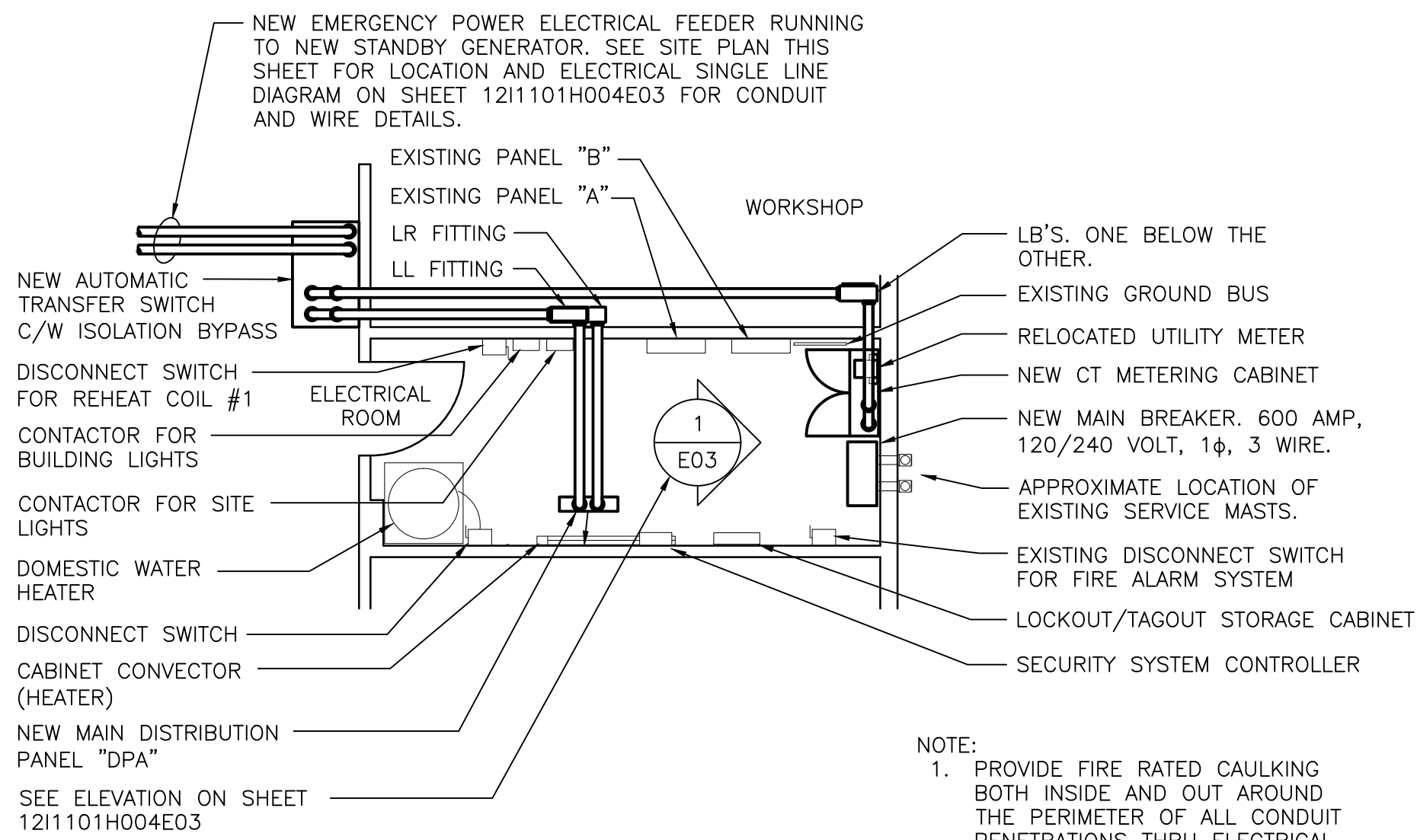
ISSUED FOR TENDER

PROJECT No. F6879-201000

DATE: MARCH 30, 2020



CLIENT/OWNER:
DEPARTMENT OF FISHERIES & OCEANS,
REAL PROPERTY, SAFETY & SECURITY



PARTIAL PLAN - ELECTRICAL ROOM - SUPPORT GARAGE

SCALE: 1:50
0m 1m 2m 3m 4m 5m

TWO 20 AMP, DUPLEX RECEPTACLES PROVIDED AND INSTALLED BY CONTRACTOR. SECURELY MOUNT NEW RECEPTACLES INSIDE GENERATOR ENCLOSURE ENSURING THEY ARE MOUNTED IN AN ACCESSIBLE LOCATION. MAKE CONNECTION TO 2 NEW 20 AMP, 1 POLE BREAKERS INDICATED FOR EXISTING PANEL "1C". SEE REVISED SINGLE LINE DIAGRAM AND NOTE 3 ON DRAWING 121101H004E02.

LOCATION FOR NEW STANDBY GENERATOR. SEE SHEET 121101H004E02 FOR DETAILS.

CONCRETE PAD FOR NEW GENERATOR SET TO ALIGN UP WITH BAIT DEPOT BUILDING LINES AND BE LOCATED APPROXIMATELY WHERE DIMENSIONED. COORDINATE FINAL LOCATION WITH PROJECT OFFICER.

UTILITY POLE. COORDINATE WITH UTILITY TO HAVE GUY WIRES RELOCATED AS REQUIRED TO ACCOMMODATE NEW ELECTRICAL TRENCH.

NOTES CONTINUED

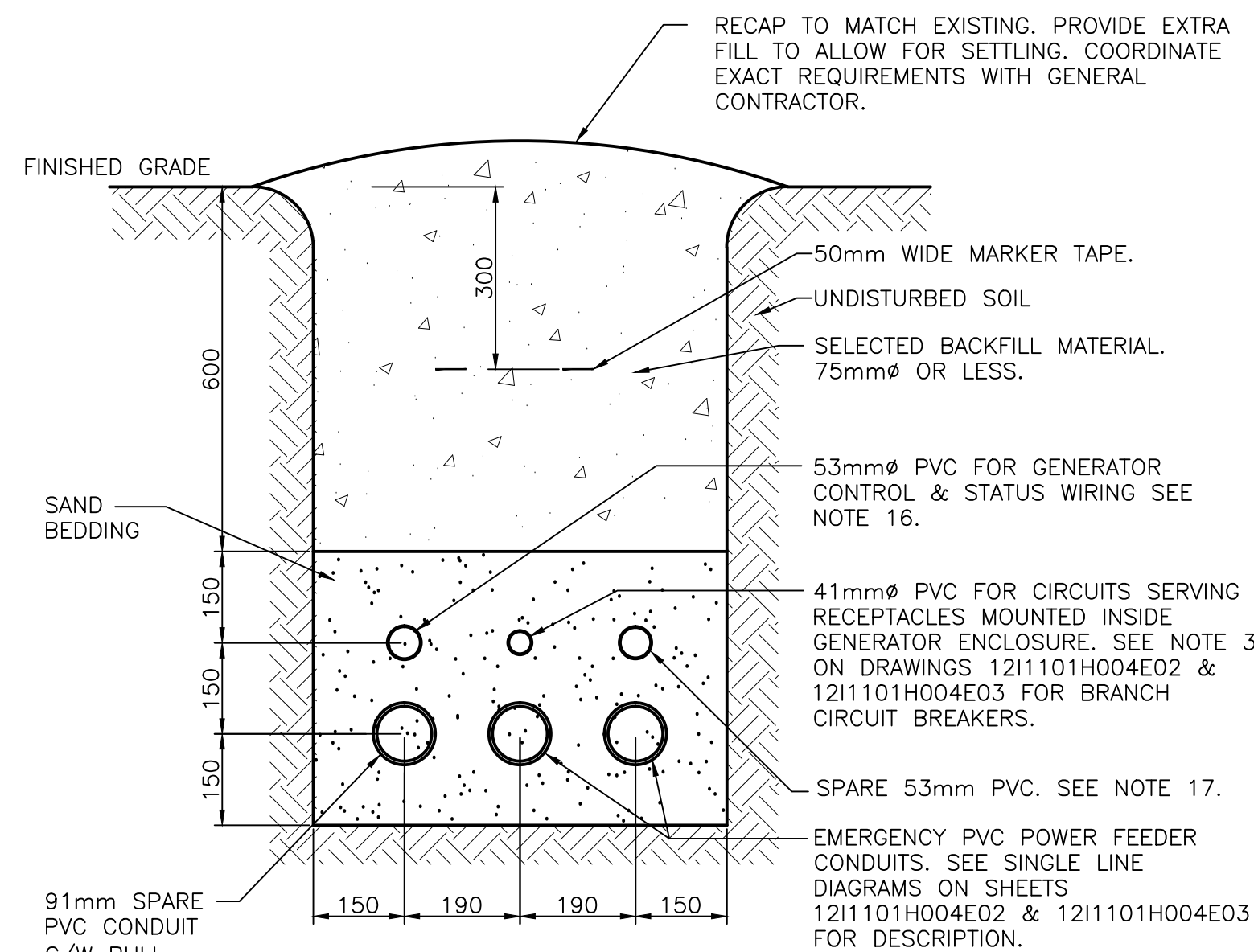
- OWNERS TO HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT INDICATED TO BE REMOVED. OTHERWISE, SAID EQUIPMENT BECOMES THE PROPERTY OF THE CONTRACTOR AND MUST BE PROMPTLY REMOVED FROM SITE.
- PROVIDE LAMICOID NAMEPLATES FOR ALL NEW EQUIPMENT AND EXISTING ELECTRICAL EQUIPMENT SUPPLIED FROM NEW CIRCUITS, INDICATE NAME OF DEVICE, ELECTRICAL CHARACTERISTICS AND FEEDER PANEL AND CIRCUIT NUMBER.
- CHAIN LINK FENCE TO BE NOT LESS THAN 3.6mm DIA. GALVANIZED STEEL WIRE WITH A MESH OF NOT MORE THAN 50mm. CORNER & GATE POSTS TO BE 89mm DIA. GALVANIZED STEEL (11.31 kg/m MIN.). INTERMEDIATE POSTS SHALL BE NOT LESS THAN 60mm DIA. GALVANIZED STEEL (5.44kg/m MIN.) TOP RAILS SHALL BE NOT LESS THAN 42mm DIA. GALVANIZED STEEL (3.35kg/m MIN.) BOTTOM OF FENCING TO BE SECURED TO GALVANIZED STEEL WIRE SPANNING POSTS. ALL FITTINGS TO BE APPROVED FOR APPLICATION.
- CONFIGURE REMOTE ANNUNCIATORS FOR NEW GENERATOR SETS TO MONITOR NEW ATS'S. COORDINATE REQUIREMENTS WITH MANUFACTURERS REP. PROVIDE AND INSTALL NEW 27mm EMT CONDUIT AND WIRING FROM ATS TO REMOTE ANNUNCIATOR. CONDUIT TO BE CONCEALED ABOVE CEILING SPACE WHERE POSSIBLE. SEE NOTE 16.
- EXERCISE CAUTION WHEN EXCAVATING AROUND WHARF AND BOAT RAMP. DAMAGE TO EXISTING BURIED ANCHORS TO BECOME THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE REPAIRED IMMEDIATELY.
- PROVIDE GROUND LOCK FOR LEFT GATE. TYPICAL FOR ALL DOUBLE GATES.
- PATCH AND MAKE GOOD ALL EXISTING SURFACES DAMAGED BY THIS WORK. REFINISH DAMAGED SURFACES TO MATCH EXISTING.
- RUN STATUS CABLE FROM EMERGENCY GENERATOR CONTROL PANEL TO REMOTE ANNUNCIATOR THRU ATS AND VIA UNDERGROUND CONDUIT AND STATUS CONDUIT AND MAKE CONNECTIONS. CABLE TO BE BELDEN #9729 TWO PAIR, SHIELDED, TWISTED, STRANDED #24 AWG (OR LARGER) COPPER CONDUCTORS, OR EQUIVALENT. BOND SHIELDING AT ONE END ONLY.
- SPARE CONDUITS FOR ELECTRICAL TRENCH RUNNING TO SUPPORT GARAGE TO BE 78mm AND 53mm PVC.

EXCAVATION AND BACK FILLING FOR NEW TRENCHING TO BE COMPLETED IN STEPS. ENSURE ALL AREAS OF THE SITE REMAIN ACCESSIBLE TO TRAFFIC DURING EXCAVATION AND BACK FILLING WORK. FULLY COORDINATE EXCAVATION AND BACKFILLING WORK WITH PROJECT AND OPERATIONS OFFICERS

PARTIAL SITE PLAN

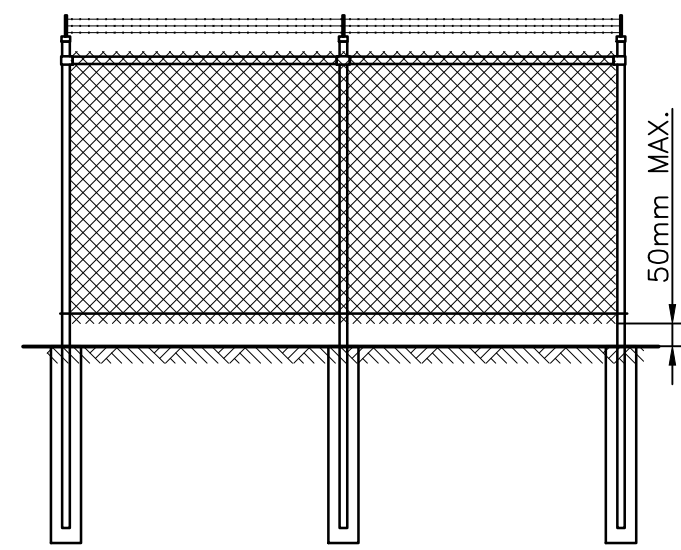
SCALE = 1 : 300
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NEW GENERATORS AND AUTOMATIC TRANSFER SWITCHES (ATS) HAVE BEEN PURCHASED BY OWNERS AND CURRENTLY RESIDE IN STORAGE IN THE ST. JOHN'S AREA. THIS CONTRACTOR IS RESPONSIBLE TO DELIVER THEM TO SITE, INSTALL AND WIRE ALL UNITS. FINAL COMMISSIONING FOR THESE UNITS IS ALSO THE RESPONSIBILITY OF THIS CONTRACTOR. NEW UPS SYSTEMS TO BE SUPPLIED, INSTALLED AND WIRED UNDER THIS CONTRACT.

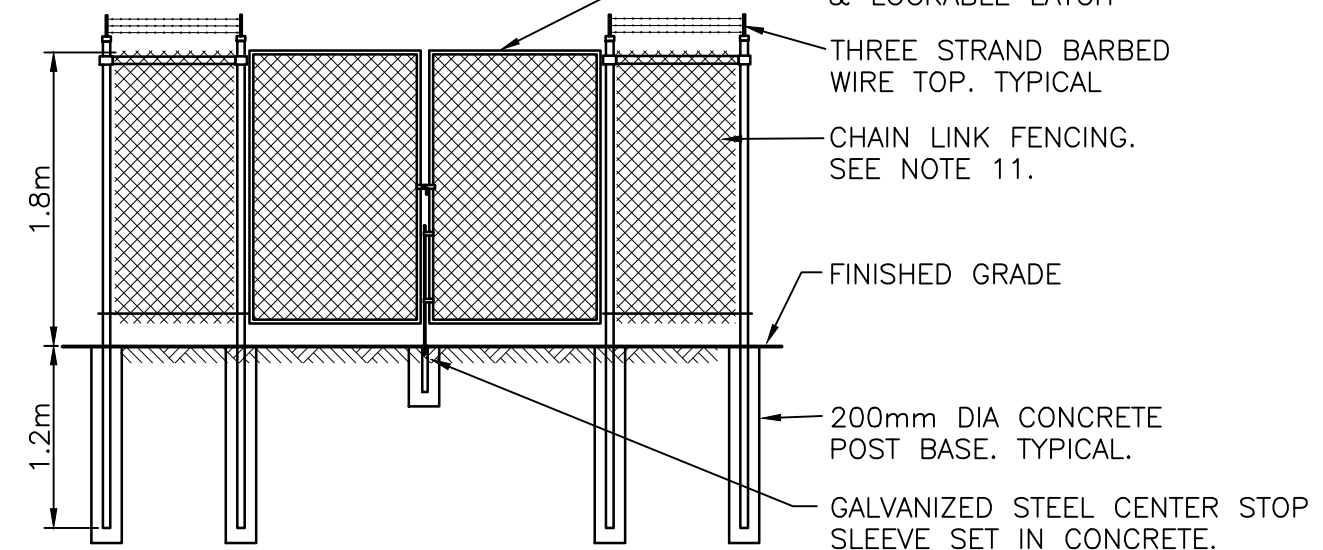


EMERGENCY POWER ELECTRICAL SERVICE TRENCH SECTION "A-A" ADMINISTRATION BUILDING

SCALE : 1:10
0mm 100 200 300 400 500 600 700 800 900 1000mm



TYPICAL FENCE DETAIL

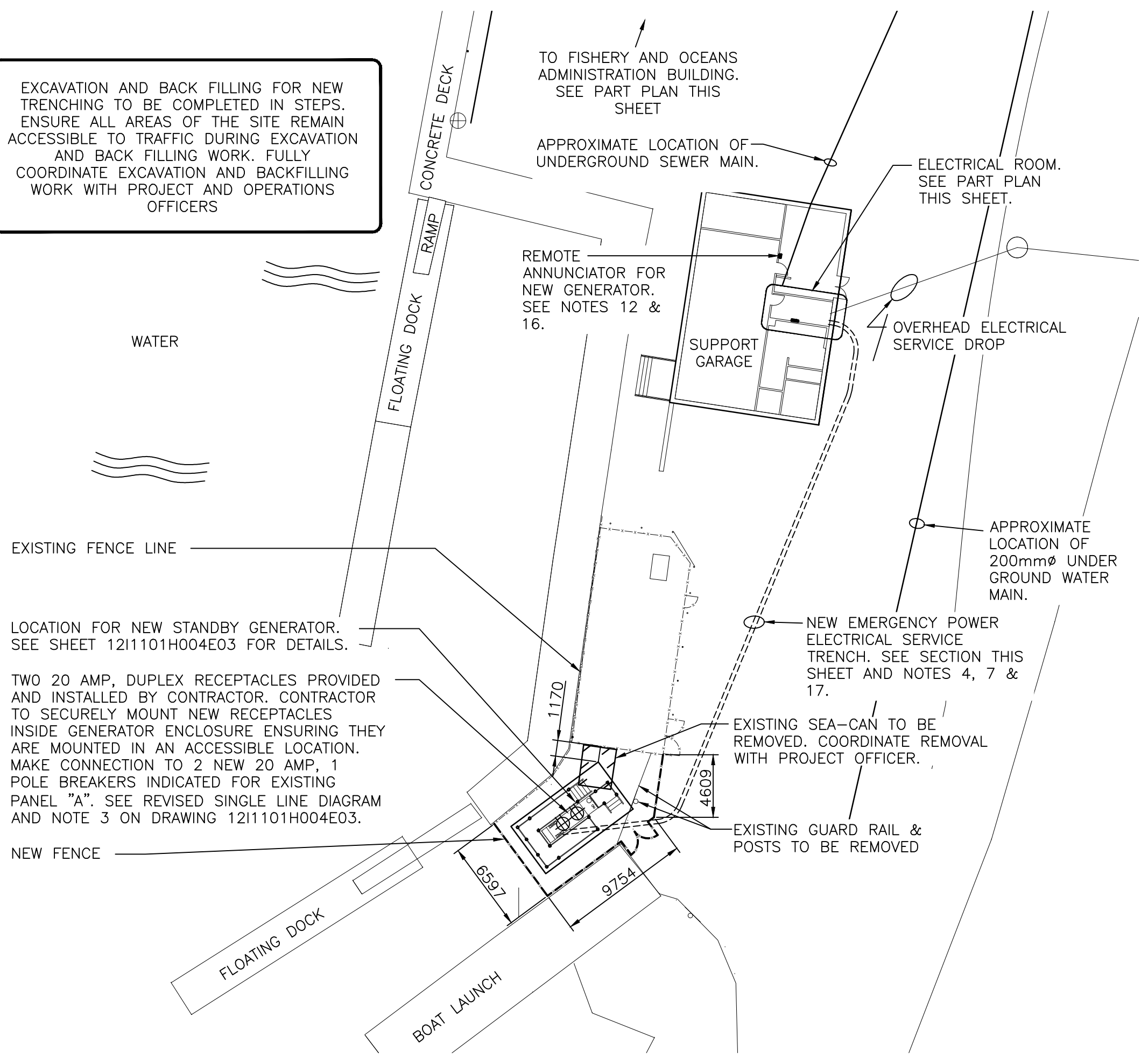


GATE DETAIL

CHAIN LINK FENCE DETAILS - EMERGENCY GENERATOR - ADMIN. BLDG.

N.T.S.

EXCAVATION AND BACK FILLING FOR NEW TRENCHING TO BE COMPLETED IN STEPS. ENSURE ALL AREAS OF THE SITE REMAIN ACCESSIBLE TO TRAFFIC DURING EXCAVATION AND BACK FILLING WORK. FULLY COORDINATE EXCAVATION AND BACKFILLING WORK WITH PROJECT AND OPERATIONS OFFICERS



PARTIAL SITE PLAN

SCALE = 1 : 300
0m 5m 10m 20m 30m

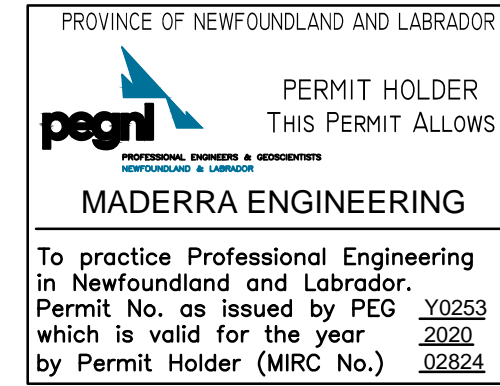
NOTES

- ALL MEASUREMENTS TO BE IN MILLIMETERS UNLESS OTHERWISE NOTED.
- DO NOT SCALE DRAWINGS.
- VERIFY ALL DIMENSIONS, CONDITIONS AND LIMITATIONS ON SITE BEFORE SUBMITTING TENDER. NOTIFY ENGINEER OF ALL DISCREPANCIES FOUND THAT MAY IMPACT CONSTRUCTION.
- LOCATE AND MARK ALL UNDERGROUND SERVICES AND EQUIPMENT INTERFERING WITH INSTALLATION OF NEW SERVICE TRENCHES. CONTACT ALL UTILITIES INCLUDING POWER, COMMUNICATIONS AND FUEL SERVICE UTILITIES FOR COORDINATION BEFORE EXCAVATIONS BEGIN. CONFIRM ACTUAL LOCATIONS OF SERVICES AND EQUIPMENT, INCLUDING UNDERGROUND SERVICES, AFFECTED BY CONSTRUCTION, ON SITE BEFORE COMMENCING WORK. LOCATIONS OF EXISTING SERVICES AND EQUIPMENT INDICATED ON DRAWINGS, INCLUDING UNDERGROUND SERVICES, ARE APPROXIMATED.
- FULLY COORDINATE ANY PLANNED INTERRUPTIONS TO EXISTING SERVICES WITH PROJECT OFFICERS. KEEP ANY PLANNED INTERRUPTIONS TO AN ABSOLUTE MINIMUM.
- CONTRACTOR IS RESPONSIBLE FOR ANY UNPLANNED INTERRUPTIONS OF AND/OR DAMAGE TO EXISTING SERVICES OCCURRING DURING CONSTRUCTION.
- SEE REVISED SINGLE LINE DIAGRAMS ON DRAWING 121101H004E02 FOR ADMIN. BLDG. AND DRAWING 121101H004E03 FOR SUPPORT GARAGE FOR DESCRIPTION OF UNDERGROUND CONDUITS AND FEEDERS.
- SEAL OPENINGS AROUND ALL NEW CONDUITS ENTERING OR LEAVING ELECTRICAL ROOM WITH APPROVED FIRE RETARDANT SEALANT.

STAMP



PERMIT



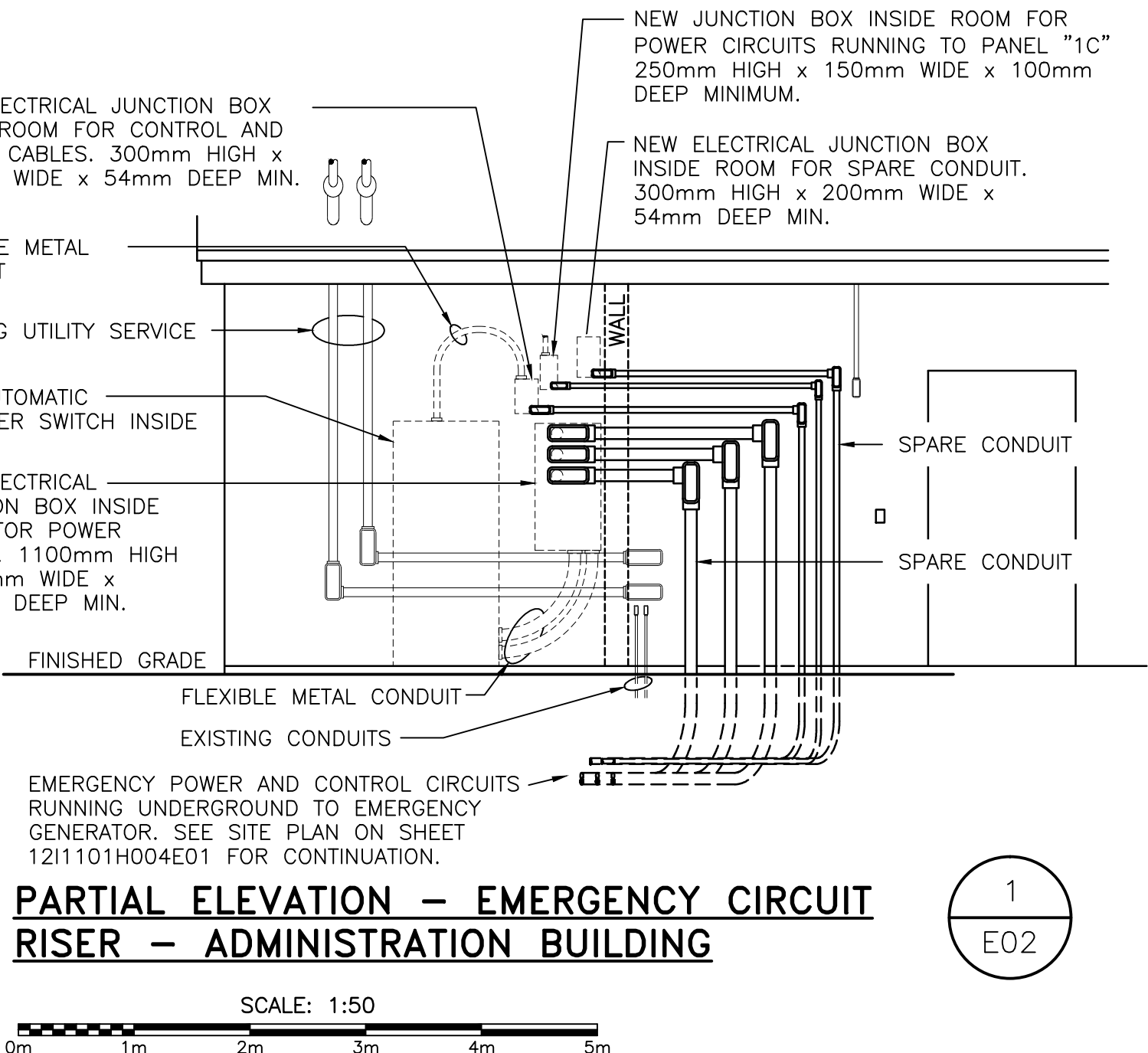
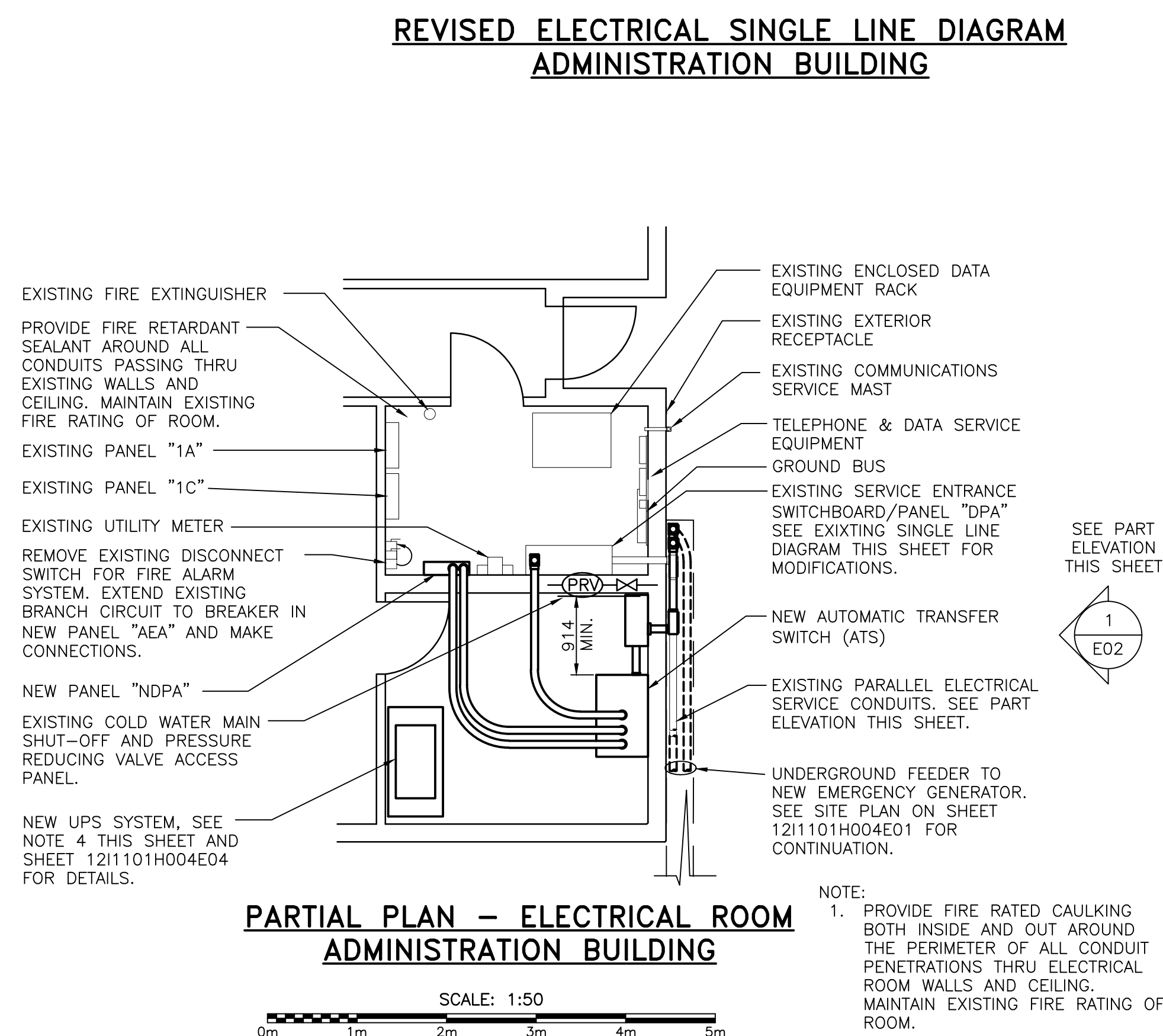
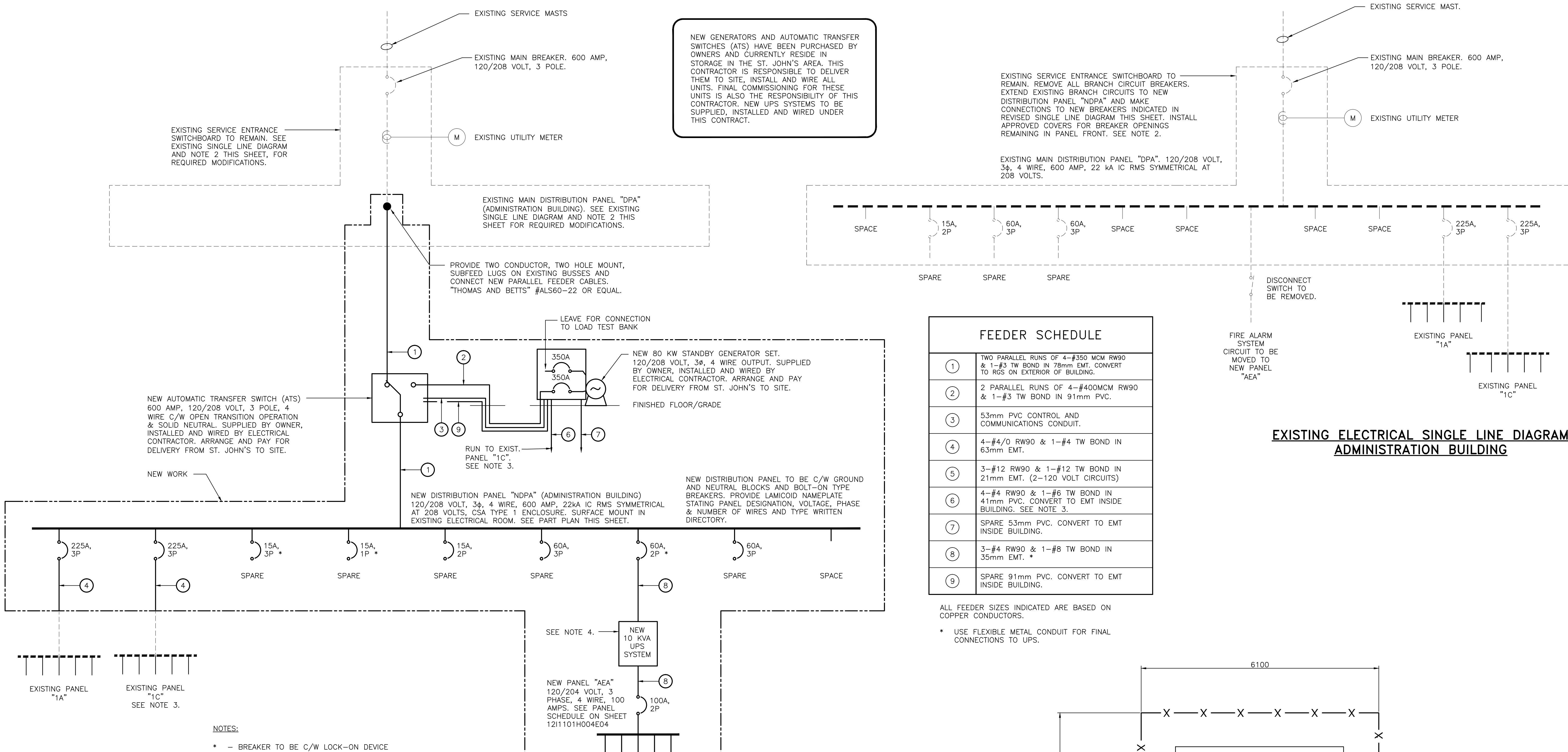
revisions	date
2	05/05/20
1	28/04/20
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EMERGENCY GENERATOR SYSTEM FOR SEARCH AND RESCUE STATION PORT AU CHOIX, NL
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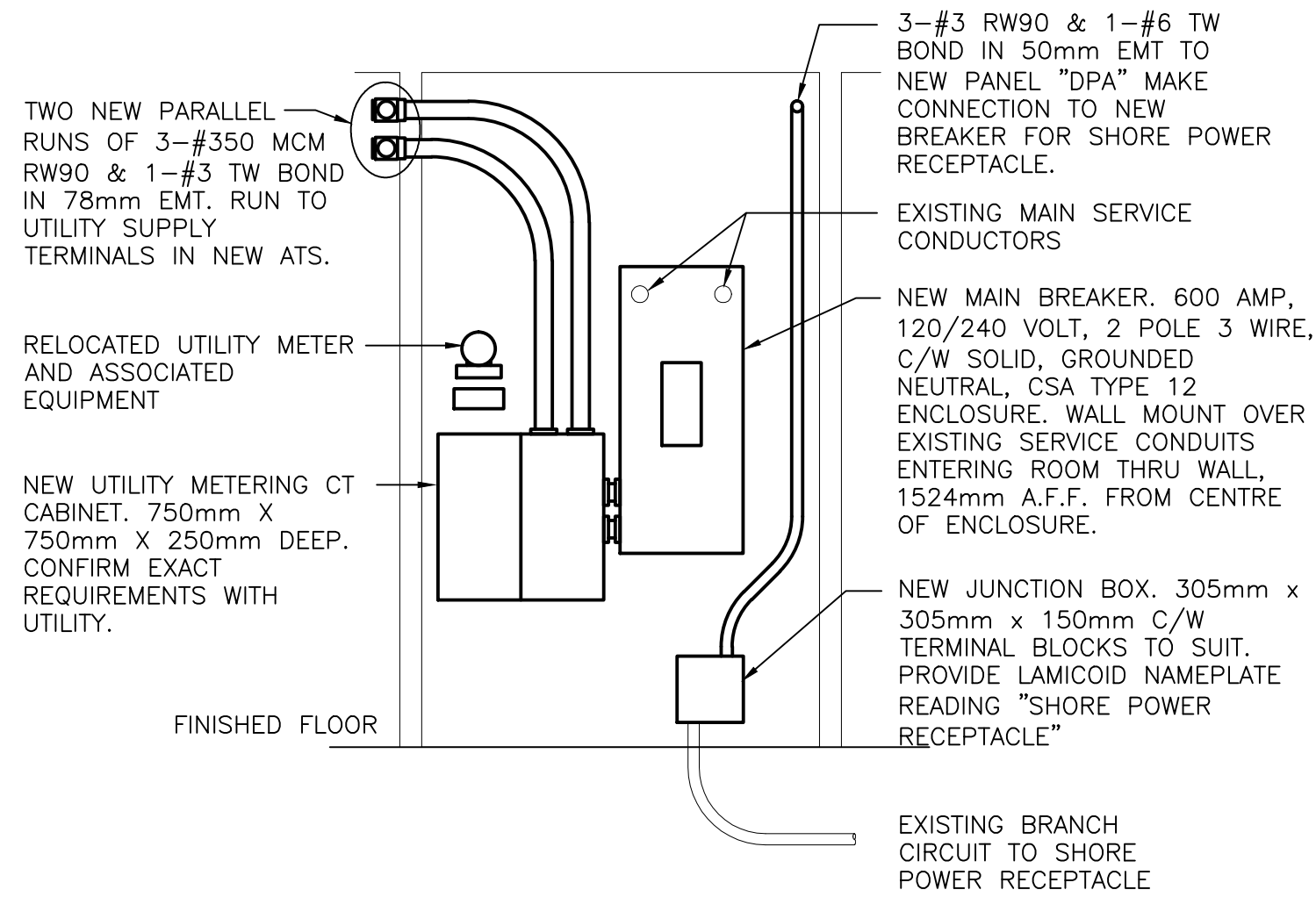
ELECTRICAL SITE PLAN AND DETAILS

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drawn	CN	desaine
date	JANUARY 2018	
approved	RF	approve
date	JANUARY 2018	
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DFO Project Manager		
project number	no. du projet	
	F6879-201000	
drawing no.	no. du dessin	
	121101H004E01	



- NOTES**
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
 - DISCONNECT AND REMOVE BRANCH CIRCUIT WIRING FROM EXISTING DISTRIBUTION PANEL "DPA". PROVIDE NEW SUBFEED LUGS IN EXISTING PANEL "DPA" TO ACCOMMODATE NEW UTILITY FEEDER RUNNING TO NEW ATS AND MAKE CONNECTIONS. PROVIDE JUNCTION BOXES FOR EXISTING BRANCH CIRCUIT WIRING AND EXTEND TO NEW DISTRIBUTION PANEL "NDPA". INSTALL APPROVED BLANK COVERS FOR REMAINING BREAKER OPENINGS IN PANEL FRONT. COORDINATE ALL WORK ON EXISTING SWITCHBOARD WITH MANUFACTURER'S REP.
 - PROVIDE TWO NEW 20 AMP, 1 POLE GFCI TYPE BREAKERS C/W LOCK ON DEVICES, IN EXISTING PANEL "1C" AND MAKE CONNECTIONS TO RECEPTACLES LOCATED INSIDE NEW STANDBY GENERATOR ENCLOSURE USING 2-#4 RW90 PER CIRCUIT, & 1-#6 TW BOND. RUN BOTH CIRCUITS IN 1-41mm PVC CONDUIT UNDERGROUND TO NEW GENERATOR. SEE SITE PLAN FOR LOCATION OF GENERATOR. PROVIDE NEW TYPE WRITTEN DIRECTORY FOR PANEL INCLUDING BOTH NEW AND EXISTING CHANGES. CONNECT ONE RECEPTACLE TO EACH CIRCUIT.
 - NEW UPS SYSTEM TO BE "EATON" 9PX10KSP OR EQUAL. 120/208 VOLT 1 PHASE, 60 HZ INPUT. 120/208 VOLT, 1 PHASE, 60 HZ OUTPUT. SEE SHEET 1211101H004E04 FOR DETAILS.

<p>STAMP</p>			
<p>PERMIT</p> <p>PROVINCE OF NEWFOUNDLAND AND LABRADOR</p> <p>PERMIT HOLDER THIS PERMIT ALLOWS</p> <p>MADERRA ENGINEERING</p> <p>To practice Professional Engineering in Newfoundland and Labrador.</p> <p>Permit No. as issued by PEG 10223</p> <p>which is valid for the year 2020</p> <p>by Permit Holder (MIRC No.) 02824</p>			
2	REVISED PROJECT No. & RE-ISSUED FOR TENDER	05/05/20	
1	RE-ISSUED FOR TENDER	28/04/20	
0	ISSUED FOR TENDER	30/03/20	
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<p>ELECTRICAL SINGLE LINE DIAGRAM AND DETAILS ADMINISTRATION BLDG.</p>			
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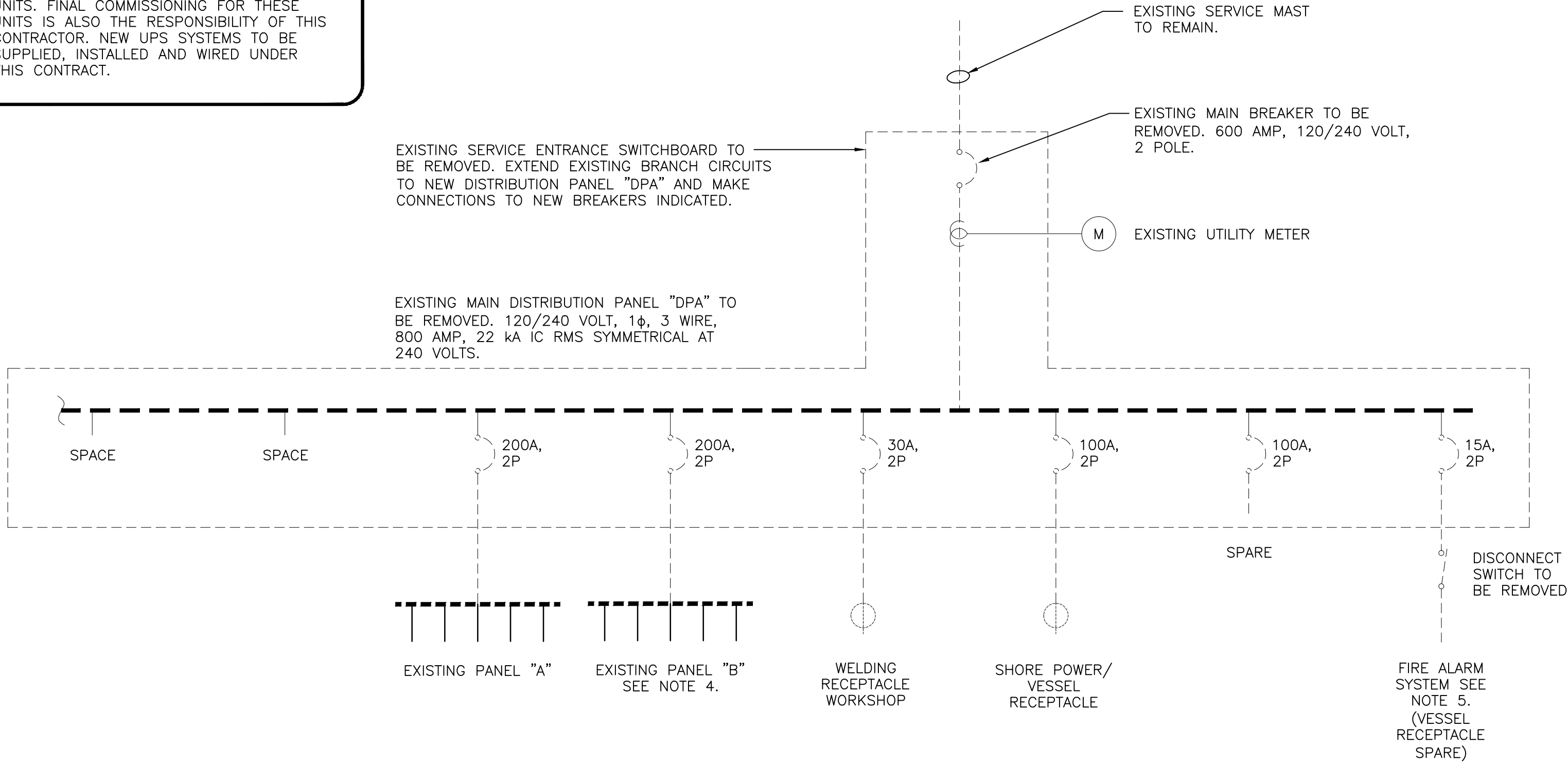


ELEVATION AT NEW ELECTRICAL SERVICE EQUIPMENT SUPPORT GARAGE

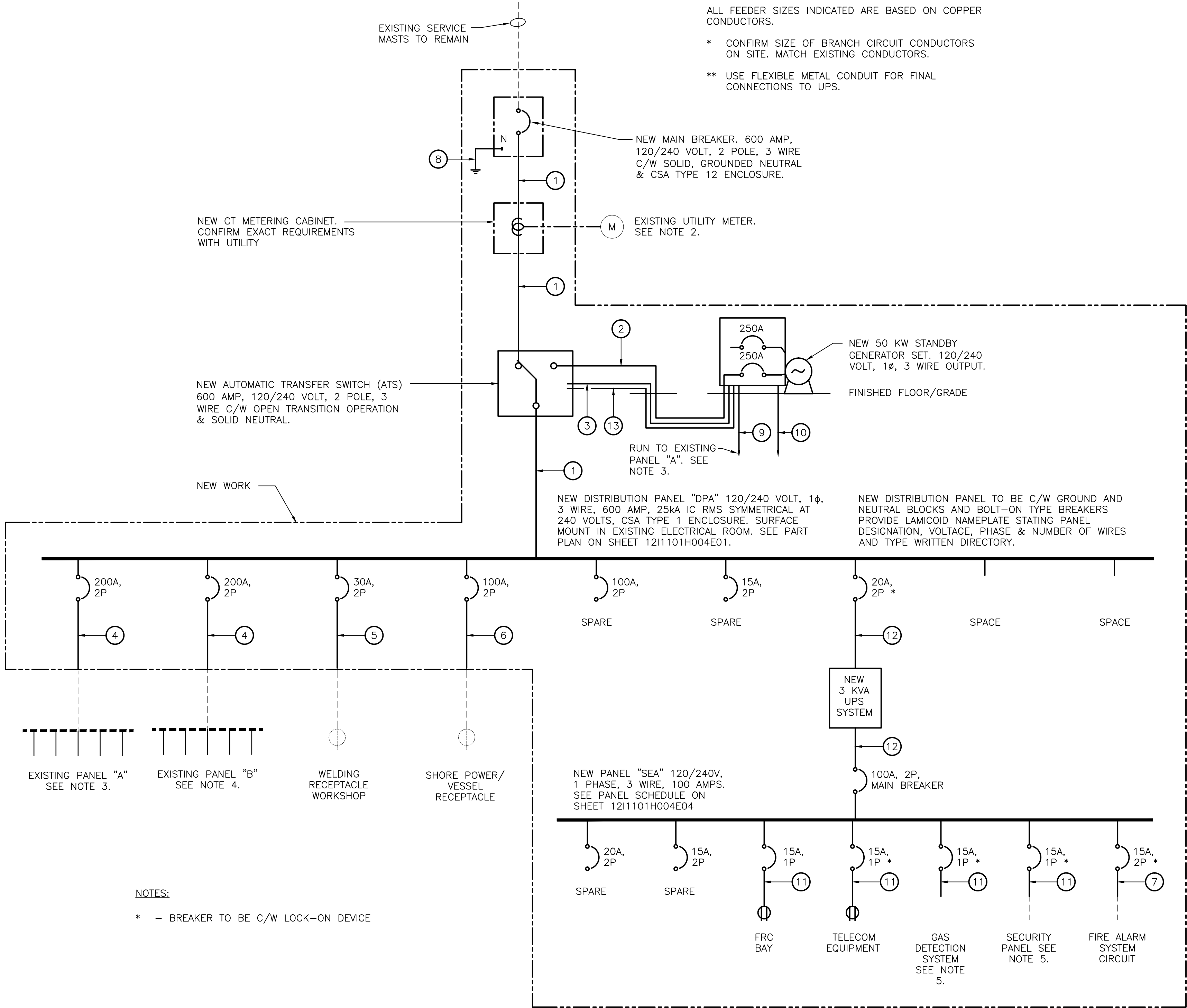
SCALE = 1 : 30
0m 0.5m 1.0m 2.0m 3.0m

FEEDER SCHEDULE	
①	TWO PARALLEL RUNS OF 3-#350 MCM RW90 & 1-#3 TW BOND IN 78mm EMT.
②	3-#300 MCM RW90 & 1-#4 TW BOND IN 78mm PVC. CONVERT TO EMT INSIDE BUILDING.
③	53mm PVC CONTROL AND COMMUNICATIONS CONDUIT.
④	3-#3/0 RW90 & 1-#4 TW BOND IN 53mmø EMT.
⑤	3-#10 RW90 & 1-#12 TW BOND IN 21mm EMT.
⑥	3-#1 RW90 & 1-#6 TW BOND IN 53mm EMT. *
⑦	3-#12 RW90 & 1-#12 TW BOND IN 21mm EMT. (2-120 VOLT CIRCUITS)
⑧	1-#6 TW GROUND IN 21mm EMT MAKE CONNECTION TO EXISTING GROUND BUS.
⑨	4-#6 RW90 & 1-#8 TW BOND IN 41mm PVC. CONVERT TO EMT INSIDE BUILDING.
⑩	SPARE 53mm PVC. CONVERT TO EMT INSIDE BUILDING.
⑪	2-#12 RW90 & 1-#12 TW BOND IN 21mm EMT.
⑫	3-#12 RW90 & 1-#12 TW BOND IN 21mm EMT. **
⑬	SPARE 78mm PVC. CONVERT TO EMT INSIDE BUILDING.

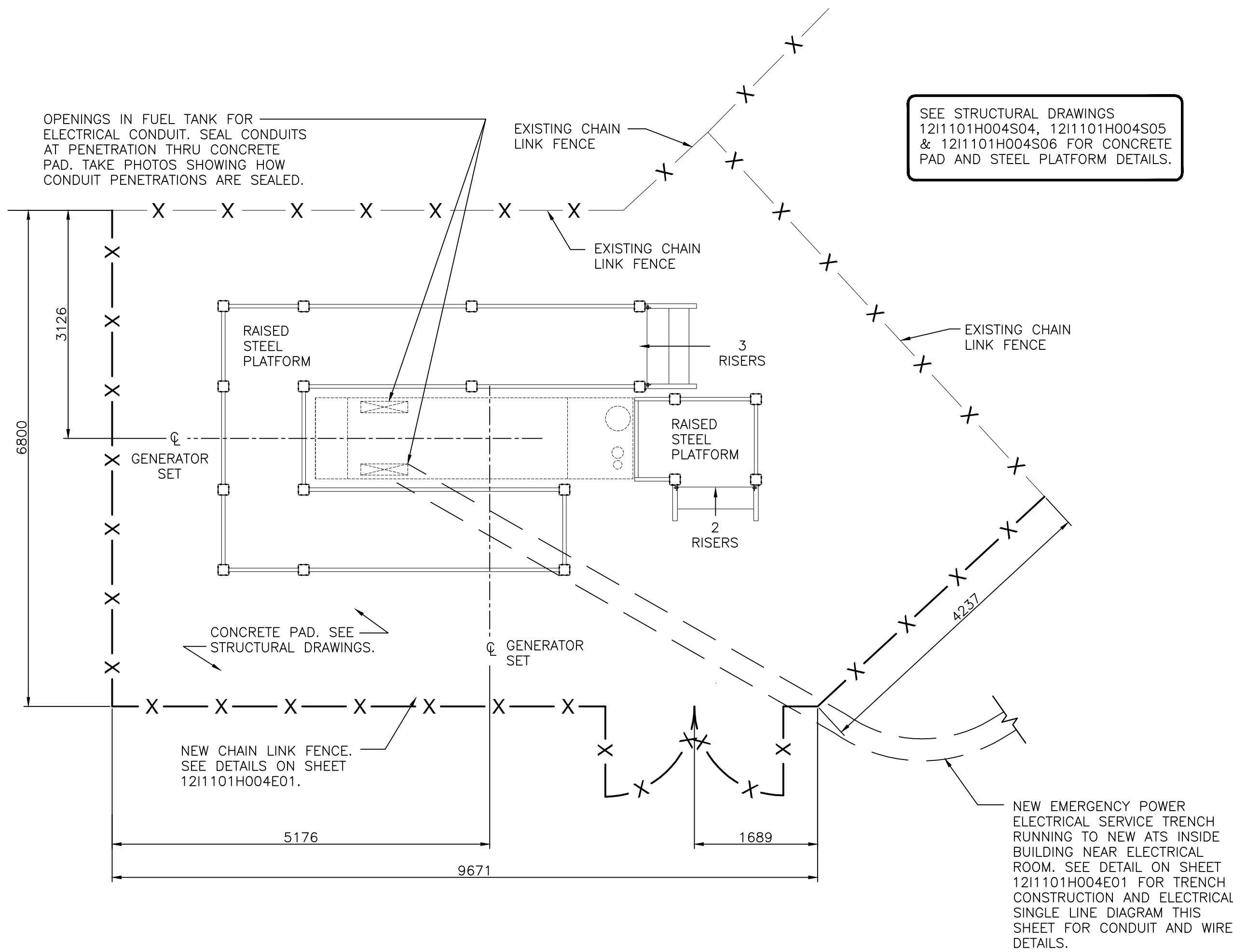
NEW GENERATORS AND AUTOMATIC TRANSFER SWITCHES (ATS) HAVE BEEN PURCHASED BY OWNERS AND CURRENTLY RESIDE IN STORAGE IN THE ST. JOHN'S AREA. THIS CONTRACTOR IS RESPONSIBLE TO DELIVER THEM TO SITE, INSTALL AND WIRE ALL UNITS. FINAL COMMISSIONING FOR THESE UNITS IS ALSO THE RESPONSIBILITY OF THIS CONTRACTOR. NEW UPS SYSTEMS TO BE SUPPLIED, INSTALLED AND WIRED UNDER THIS CONTRACT.



EXISTING ELECTRICAL SINGLE LINE DIAGRAM SUPPORT GARAGE



REVISED ELECTRICAL SINGLE LINE DIAGRAM SUPPORT GARAGE



STANDBY GENERATOR CONCRETE PAD DETAIL SUPPORT GARAGE

SCALE: 1:50
0m 1m 2m 3m 4m 5m

NOTES

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
- RELOCATE EXISTING UTILITY METER AND ASSOCIATED EQUIPMENT, AS INDICATED IN PART PLAN ELECTRICAL ROOM ON SHEET 1211101H004E01 AND ELEVATION ON THIS SHEET.
- PROVIDE TWO NEW 20 AMP, 1 POLE GFCI TYPE BREAKERS C/W LOCK ON DEVICES, IN EXISTING PANEL "A" AND MAKE CONNECTIONS TO RECEPTACLES LOCATED INSIDE NEW STANDBY GENERATOR ENCLOSURE USING 2-#6 RW90, PER CIRCUIT, & 1-#8 TW BOND. RUN BOTH CIRCUITS IN 1-27mmø PVC CONDUIT UNDERGROUND TO NEW GENERATOR. SEE SITE PLAN FOR LOCATION OF GENERATOR, CONNECT ONE RECEPTACLE TO EACH CIRCUIT. PROVIDE NEW TYPE WRITTEN DIRECTORY FOR PANEL INCLUDING BOTH NEW AND EXISTING CHANGES.
- RELOCATE EXISTING CIRCUITS FOR SECURITY PANEL AND GAS DETECTION SYSTEM FROM PANEL "B" AND MAKE CONNECTION TO NEW BREAKERS INDICATED IN NEW PANEL "SEA". SEE REVISED SINGLE LINE DIAGRAM.
- RELOCATE EXISTING FIRE ALARM CIRCUIT FROM EXISTING DISTRIBUTION PANEL "DPA" TO NEW PANEL "SEA" AND MAKE CONNECTION TO NEW BREAKER INDICATED.

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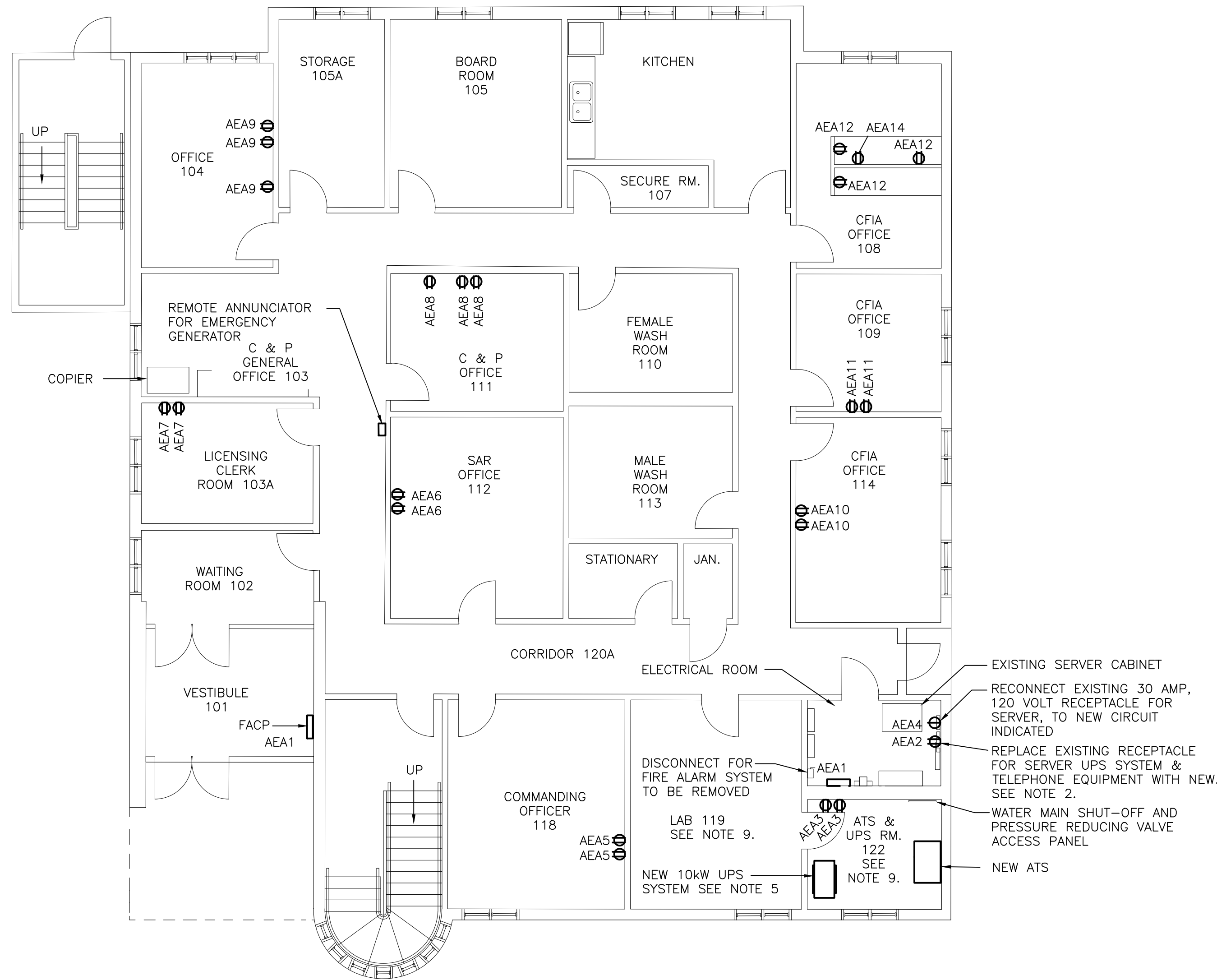
2	REVISED PROJECT No. & RE-ISSUED FOR TENDER	05/05/20
1	RE-ISSUED FOR TENDER	28/04/20
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revisions		date

project
EMERGENCY GENERATOR SYSTEM FOR SEARCH AND RESCUE STATION PORT AU CHOIX, NL
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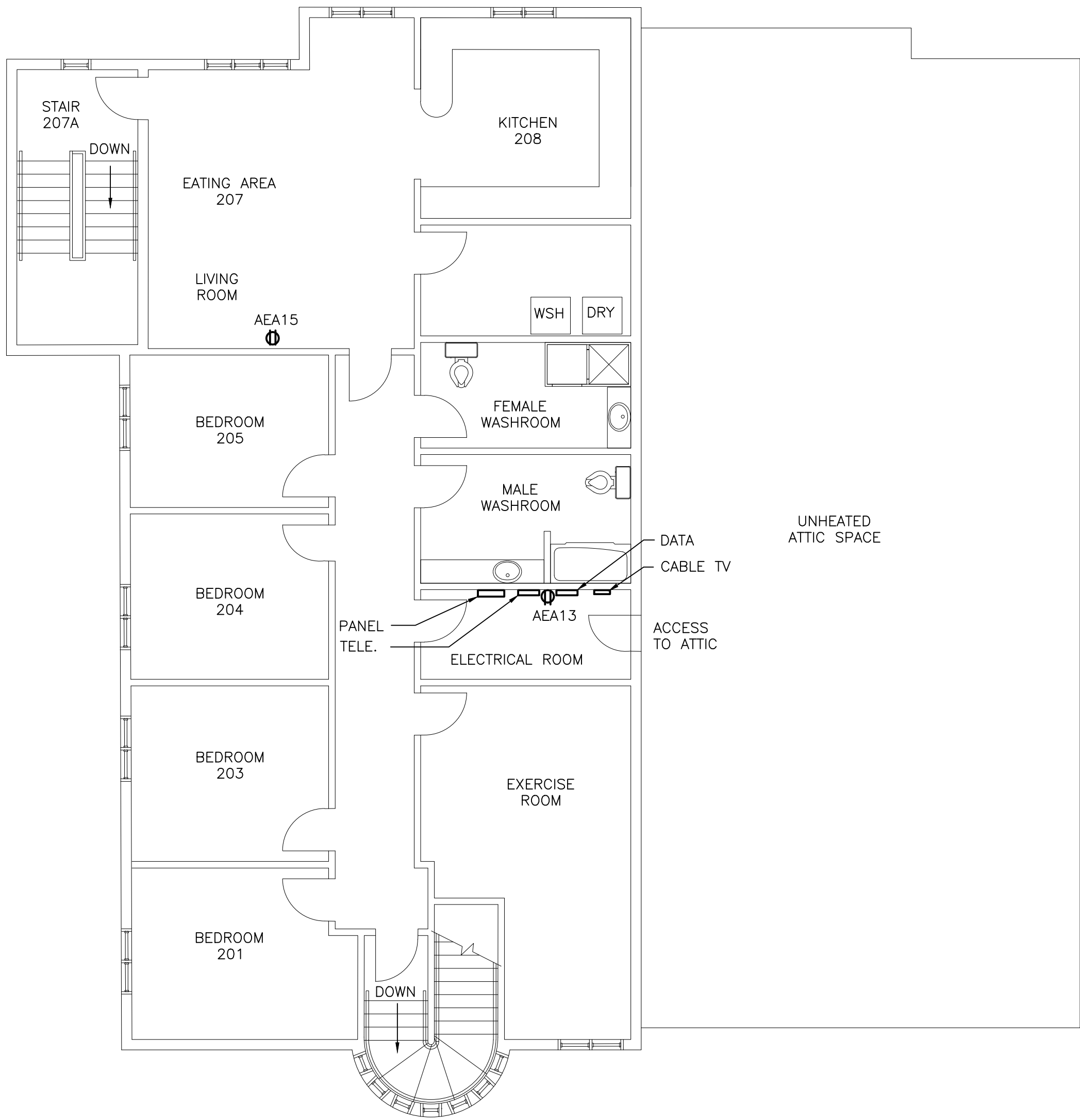
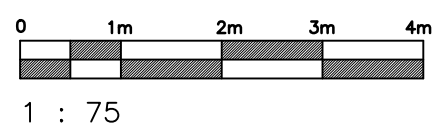
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ELECTRICAL SINGLE LINE DIAGRAM AND DETAILS SUPPORT GARAGE
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drawn **CN** dessine
date **JANUARY 2018**
approved **RF** approve
Tender **JANUARY 2018** Soumission

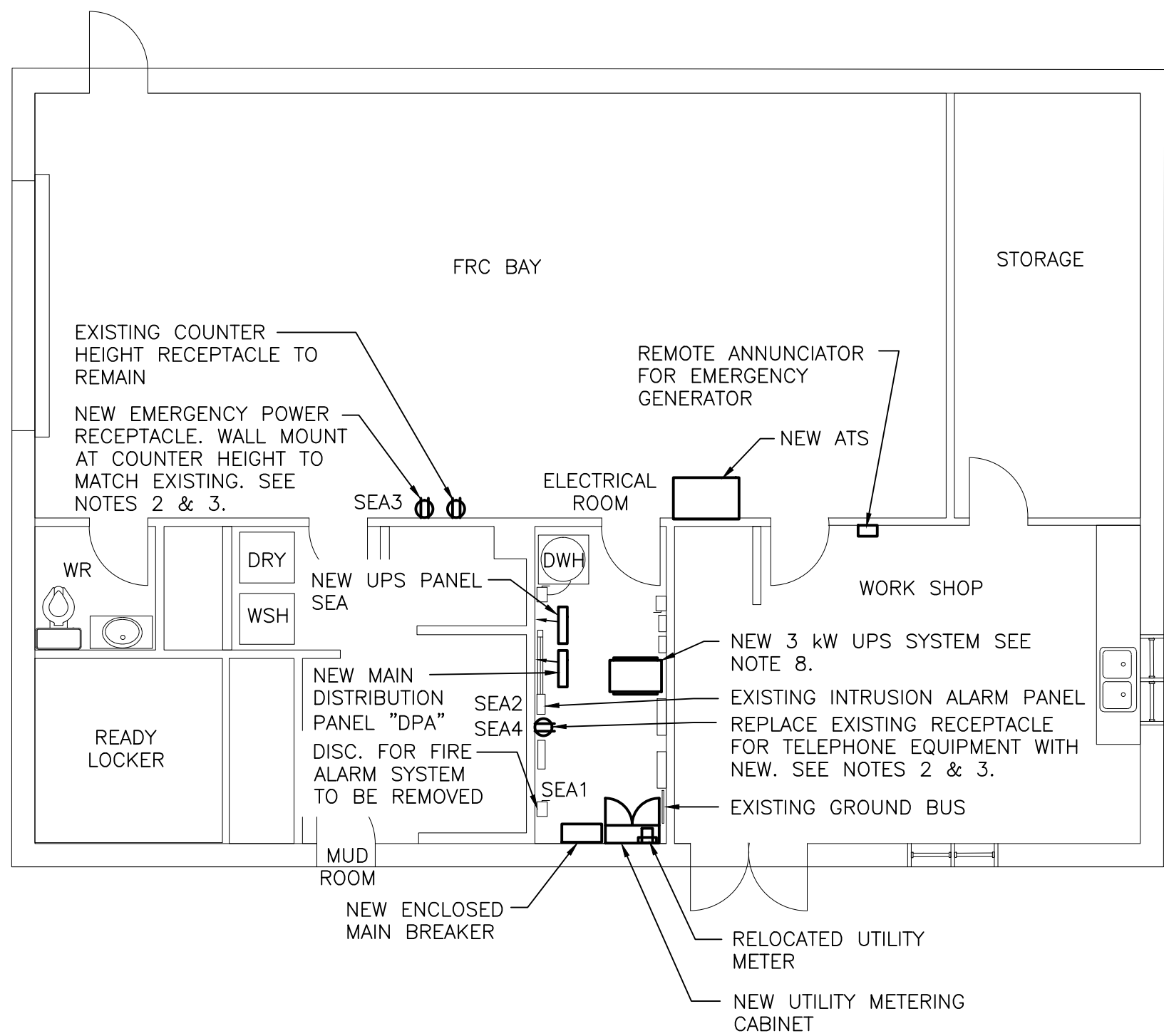
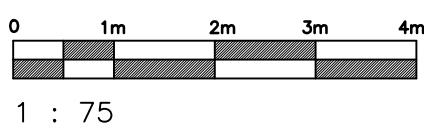
DFO Project Manager
project number **F6879-201000**
drawing no. **1211101H004E03**
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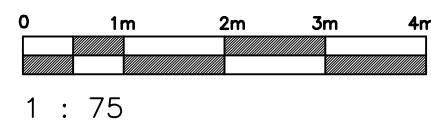
ADMINISTRATION BUILDING LEVEL ONE



ADMINISTRATION BUILDING LEVEL TWO



SUPPORT GARAGE



ADMINISTRATION BUILDING											
PANEL "AEA" PANEL SCHEDULE											
TYPE 24 CIRCUIT C/W 100 AMP MAIN BREAKER. TOP FEED											
RATING 120/208V, 3PH., 4W., 100 AMP											
STANDARD OF ACCEPTANCE CUTLER HAMMER POW-R-LINE 1a											
MINIMUM INTERRUPTING CAPACITY 10000 R.M.S. SYMM AMPERES											
NOTES * - BREAKER TO BE C/W LOCK-ON DEVICE											
CIRCUIT DESCRIPTION	LOAD WATTS	WIRE SIZE	BRKR. SIZE	CIRCUIT NO.	BRKR. SIZE	WIRE SIZE	LOAD WATTS	CIRCUIT DESCRIPTION	LOAD WATTS	WIRE SIZE	BRKR. SIZE
FIRE ALARM CONTROL PANEL VEST. 101	200	12	15*	1	2	15*	200	RECEPT FOR TELE/DATA EQUIPMENT	200	12	15*
RECEPTS FOR ATS & UPS ROOM 122	400	12	15	3	4	30*	2000	RECEPTACLE FOR SERVER	2000	12	15*
RECEPTS FOR COMMANDING OFFICER'S OFFICE 118	400	12	15	5	6	15	400	RECEPTS FOR SAR OFFICE ROOM 112	400	12	15
RECEPTS FOR LICENSING CLERK ROOM 103A	400	12	15	7	8	15	600	RECEPTS FOR C&P OFFICE ROOM 111	600	12	15
RECEPTS FOR OFFICE ROOM 104	600	12	15	9	10	15	400	RECEPTS FOR CFIA OFFICE ROOM 114	400	12	15
RECEPTS FOR CFIA OFFICE ROOM 109	400	12	15	11	12	15	600	RECEPTS FOR CFIA OFFICE ROOM 108	600	12	15
RECEPTACLE ELECTRICAL ROOM LEVEL 2	200	12	15	13	14	15	200	RECEPTS FOR CFIA OFFICE ROOM 108	200	12	15
RECEPTACLE LIVING ROOM LEVEL 2	200	12	15	15	16	15		SPARE			
SPARE				15	17	18					
					19	20					
					21	22					
					23	24					
CONNECTED LOAD: 6.8 KW											

SUPPORT GARAGE ELECTRICAL ROOM											
PANEL "SEA" PANEL SCHEDULE											
TYPE 24 CIRCUIT C/W 100 AMP MAIN BREAKER. TOP FEED											
RATING 120/240V, 1PH., 3W., 100 AMP											
STANDARD OF ACCEPTANCE CUTLER HAMMER POW-R-LINE 1a											
MINIMUM INTERRUPTING CAPACITY 10000 R.M.S. SYMM AMPERES											
NOTES * - BREAKER TO BE C/W LOCK-ON DEVICE											
CIRCUIT DESCRIPTION	LOAD WATTS	WIRE SIZE	BRKR. SIZE	CIRCUIT NO.	BRKR. SIZE	WIRE SIZE	LOAD WATTS	CIRCUIT DESCRIPTION	LOAD WATTS	WIRE SIZE	BRKR. SIZE
FIRE ALARM CONTROL PANEL	200	12	15*	1	2	15*	200	INTRUSION ALARM PANEL	200	12	15*
NEW EMERGENCY POWER RECEPTACLE FRC BAY	200	12	15	3	4	15*	200	RECEPTACLE FOR TELEPHONE EQUIPMENT	200	12	15*
SPARE				15	5	6	15	SPARE			
					7	8					
					8	10					
					11	12					
					13	14					
					15	16					
					17	18					
					19	20					
					21	22					
					23	24					
CONNECTED LOAD: 800 W											

NOTES CONTINUED

- DISCONNECT EXISTING RECEPTACLE CIRCUITS (RECEPTACLES INDICATED WITH NEW CIRCUIT NUMBERS) IN CEILING SPACE ABOVE AND MAKE CONNECTIONS TO NEW CIRCUITS INDICATED. SEE NOTE 7.
- NEW BRANCH CIRCUIT WIRING TO BE RW90 (#12 AWG MINIMUM SIZE) IN EMT (21mm MINIMUM) CONDUIT. RUN CONCEALED BEHIND WALLS, UNDER FLOORS OR ABOVE CEILINGS WHERE POSSIBLE. PATCH AND MAKE GOOD ALL FINISHED AREAS DAMAGED BY INSTALLATION. REPAIRED AREAS TO BE FINISHED TO MATCH EXISTING SURROUNDING AREAS.
- NEW UPS SYSTEM FOR THE SUPPORT GARAGE TO BE "EATON" 9PX3UNP2 C/W 4 POST RAIL KIT, OR EQUAL. 120/240 VOLT 1 PHASE, 60 HZ INPUT. 120/240 VOLT, 1 PHASE, 3 WIRE, 60 HZ OUTPUT. PROVIDE HEAVY DUTY STEEL EQUIPMENT RACK CINCH ANCHORED TO FLOOR. RACK TO BE "HUBBELL" SF841924T OR EQUAL.
- CONTRACTOR IS RESPONSIBLE FOR ARCHITECTURAL RENOVATIONS TO ATS AND UPS ROOM 122 UNDER THIS CONTRACT, TO ACCOMMODATE THE NEW ATS AND UPS. ALL WORK TO COMPLY WITH THE LATEST EDITION OF NATIONAL BUILDING AND FIRE CODES. SUBMIT SHOP DRAWINGS OF ALL ARCHITECTURAL WORK TO OWNER FOR REVIEW. ARCHITECTURAL RENOVATIONS REQUIRED IN ROOM 122 INCLUDE:
 - REMOVAL OF ALL MATERIALS IN THE ROOM (INCLUDES DESK, CABINET, SIDE TABLE AND CHAIR) AND TURN OVER TO CLIENT.
 - REMOVAL OF THE COMPLETE DOOR FRAME, DOOR, AND DOUBLE SIDE LIGHTS. REMOVE THE TILING ALONG THIS WALL ONLY OF ROOM 119.
 - REMOVAL OF EXISTING CARPET AND UNDERLYING COATINGS DOWN TO THE ORIGINAL CONCRETE SUBSTRATE.
 - PAINTING OF THE EXPOSED CONCRETE FLOOR (PAINT COLOUR TO BE SELECTED BY THE OWNER) MAKE ALLOWANCE FOR GROUTING FLOOR TO FILL ANY CRACKS AND /OR IRREGULARITIES.
 - CONSTRUCTION OF A NEW FALSE WALL BETWEEN ROOMS 119 AND 122 IN THE AREA WHERE THE EXISTING DOOR/SIDE LIGHTS ARE BEING REMOVED. NEW FALSE WALL TO CONSIST OF WOOD HEADERS, 38X140 WOOD STUDS AT 400mm O.C., R20 BATT INSULATION AND TWO LAYERS OF 13mm THICK GYPSUM BOARD (EACH SIDE). WALL TO BE PLASTERED AND PAINTED (BOTH SIDES) TO MATCH EXISTING COLOURS. INSTALL NEW GYPSUM BOARD, PLASTER AND PAINT, WHERE REQUIRED, IN THE AREA WHERE TILING IS BEING REMOVED ALONG THE WALL IN ROOM 119. MAKE ALLOWANCE FOR NEW/EXISTING ELECTRICAL TO SUIT NEW ARCHITECTURAL WORK.
- SUPPLY AND INSTALL FIRE RATED DOOR COMPLETE WITH NEW LEVERED DOOR HARDWARE. CONFIRM SWING DIRECTION WITH OWNER. KEYING SYSTEM TO MATCH EXISTING ELECTRICAL ROOM.

NOTES

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
- REPLACE ALL EXISTING RECEPTACLES WITH NEW. NEW EMERGENCY POWER (UPS) RECEPTACLES TO BE BLUE, 120 VOLT, 15 AMP, DUPLEX TYPE "HUBBELL" No. 5262BL C/W NPJ88L BLUE NYLON COVERPLATES OR EQUAL. PROVIDE PRINTED WHITE LABELS ON COVERPLATES INDICATING "UPS POWER" AND CIRCUIT NUMBER. RECEPTACLES INSTALLED WITH DATACOM DEVICES UNDER GANGED COVERPLATES TO RETAIN EXISTING COVERPLATES.
- DISCONNECT RECEPTACLE FOR TELEPHONE SERVICE EQUIPMENT, POWER SUPPLY FOR EXISTING INTRUSION ALARM PANEL AND FIRE ALARM PANEL. MARK BREAKERS AS SPARE. PROVIDE NEW TYPE WRITTEN DIRECTORIES C/W CIRCUIT CHANGES INDICATED. CONNECT DEVICES TO NEW CIRCUITS INDICATED. LEAVE BREAKERS IN THE OFF POSITION.
- 120/208 VOLT AND 120/240 VOLT PANELBOARDS TO BE C/W GROUND AND NEUTRAL BLOCKS AND BOLT-ON TYPE BREAKERS WITH AN I.C. OF 10,000 AMPS RMS SYMMETRICAL. PROVIDE LOCKING DOOR, TYPE WRITTEN DIRECTORY AND LAMICOID NAMEPLATE STATING PANEL DESIGNATION, VOLTAGE, PHASE AND NUMBER OF WIRES. PANEL DOORS TO BE KEYPED ALIKE. SURFACE MOUNT PANELBOARDS ON 19mm PLYWOOD. PAINT PLYWOOD WITH COLOUR TO MATCH ADJACENT WALL SURFACES USING FIRE RETARDANT PAINT.
- NEW UPS SYSTEM FOR THE ADMIN. BLDG. TO BE "EATON" 9PX10KSP C/W 4 POST RAIL KIT, OR EQUAL. 120/208 VOLT 3 PHASE, 60 HZ INPUT. 120/208 VOLT, 3 PHASE, 4 WIRE, 60 HZ OUTPUT. PROVIDE HEAVY DUTY STEEL EQUIPMENT RACK CINCH ANCHORED TO FLOOR. RACK TO BE "HUBBELL" SF841924T OR EQUAL.

STAMP



PERMIT



2	REVISED PROJECT No. & RE-ISSUED FOR TENDER	05/05/20
1	RE-ISSUED FOR TENDER	28/04/20
0	ISSUED FOR TENDER	30/03/20

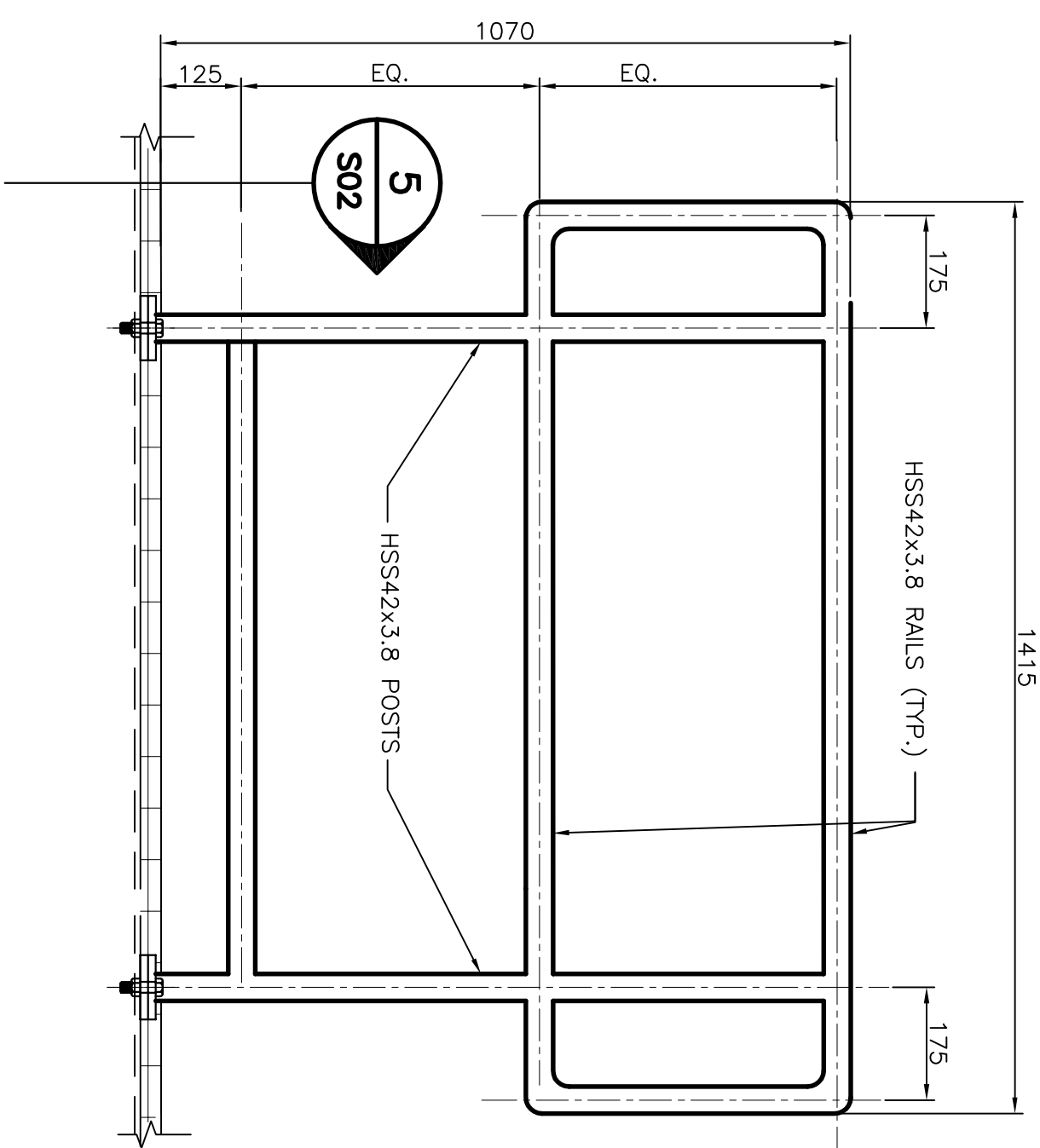
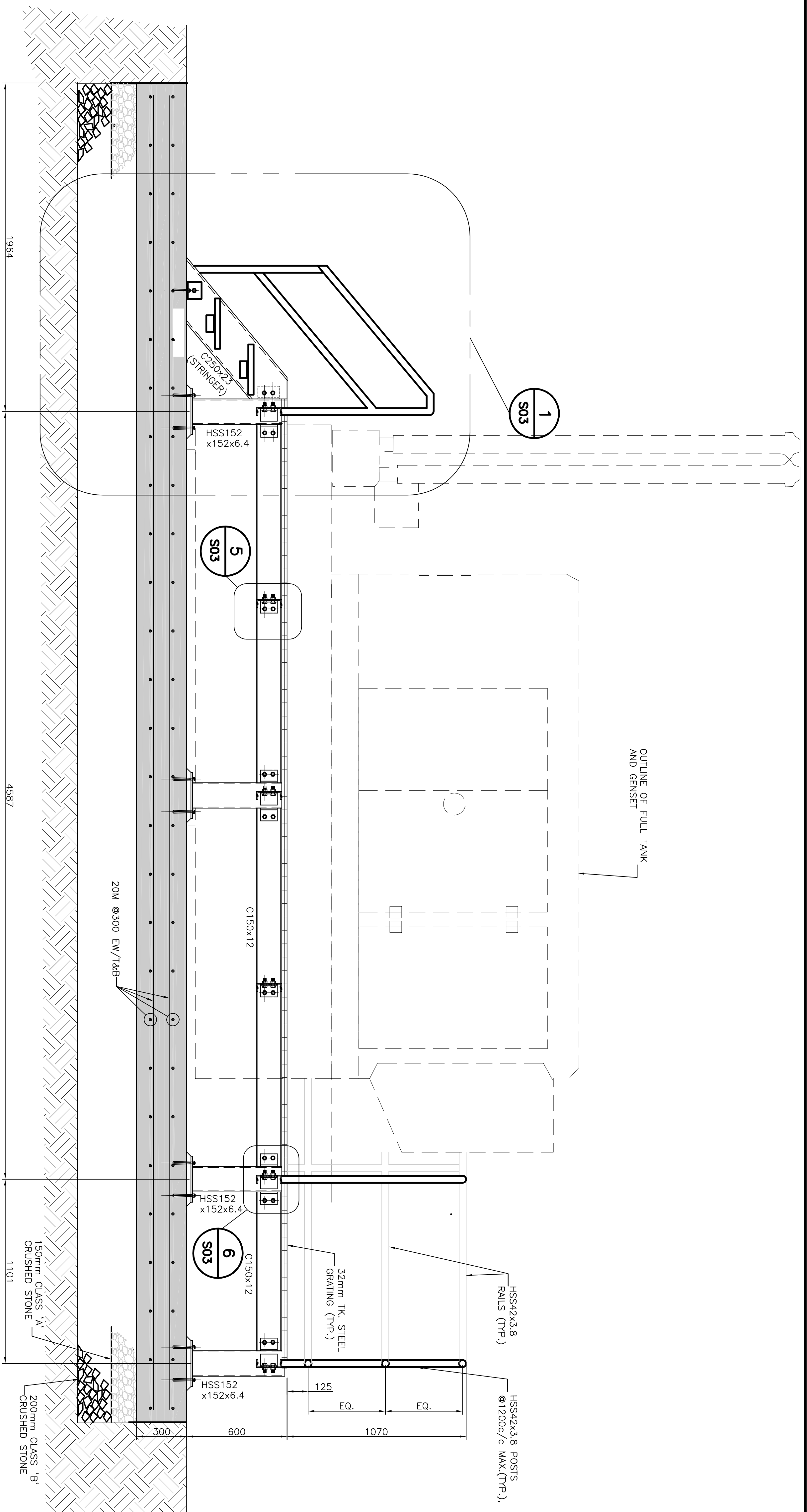
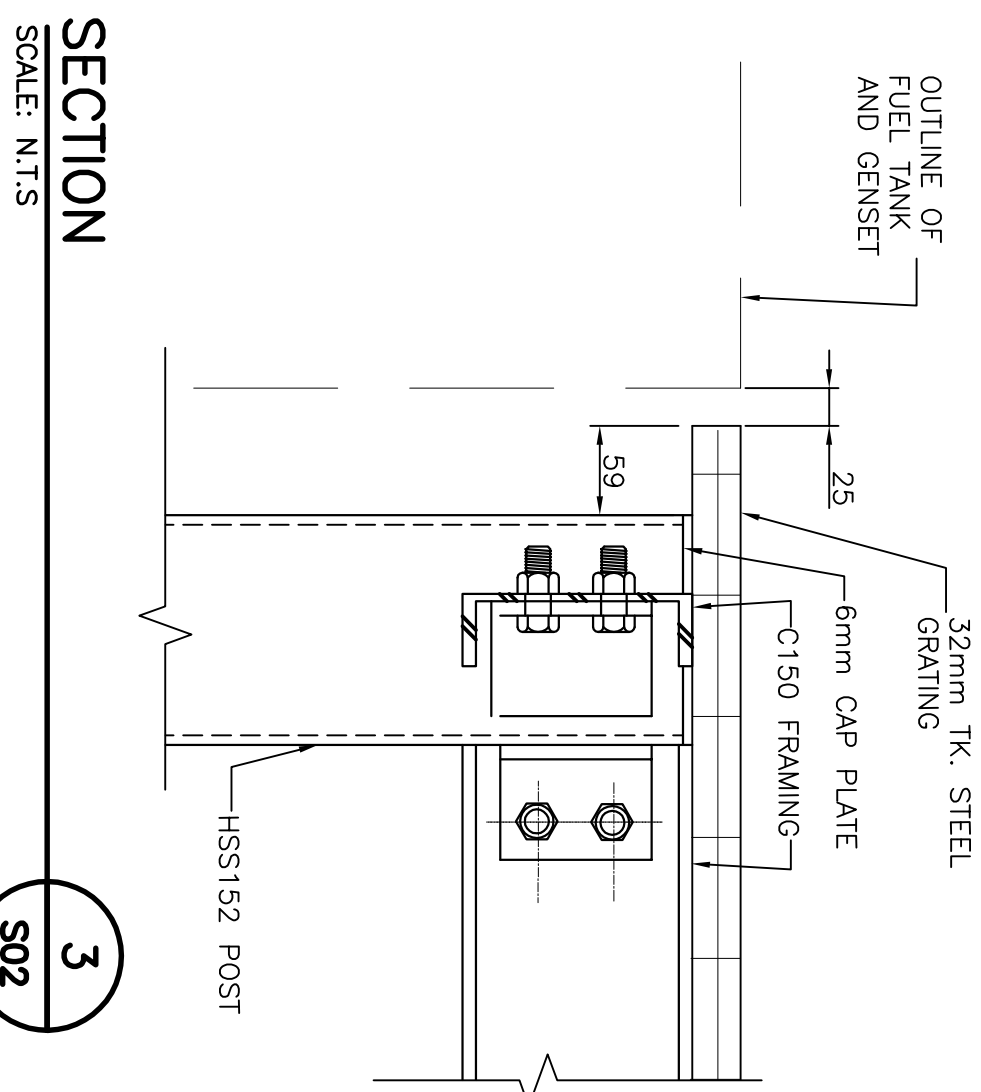
EMERGENCY GENERATOR SYSTEM FOR SEARCH AND RESCUE STATION PORT AU CHOIX, NL

drawing design

ELECTRICAL PLANS AND SCHEDULES

designed	CON	concu
date	JANUARY 2018	
drawn	CON	dessine
date	JANUARY 2018	
approved	RF	approuve
	JANUARY 2018	
Tender		Soumission
DFO Project Manager		
project number		no. du projet
	F6879-201000	
drawing no.		no. du dessin
	1211101H004E04	

- NOTES
1. ALL MEASUREMENTS TO BE IN MILLIMETERS UNLESS OTHERWISE NOTED.
 2. DO NOT SCALE DRAWINGS.
 3. VERIFY ALL DIMENSIONS, CONDITIONS AND LIMITATIONS ON SITE BEFORE SUBMITTING TENDER. DISCREPANCIES FOUND THAT MAY IMPACT CONSTRUCTION.

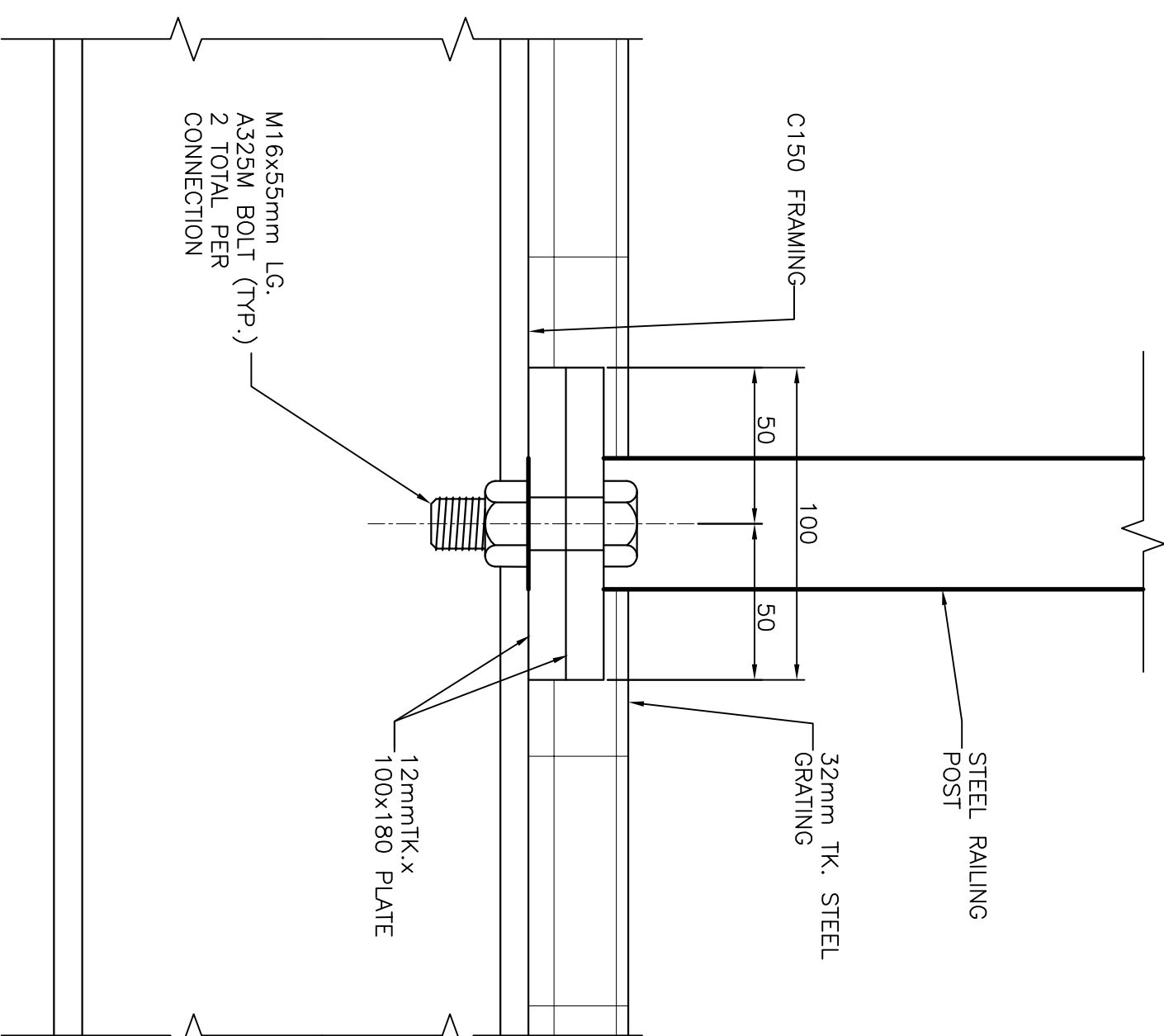
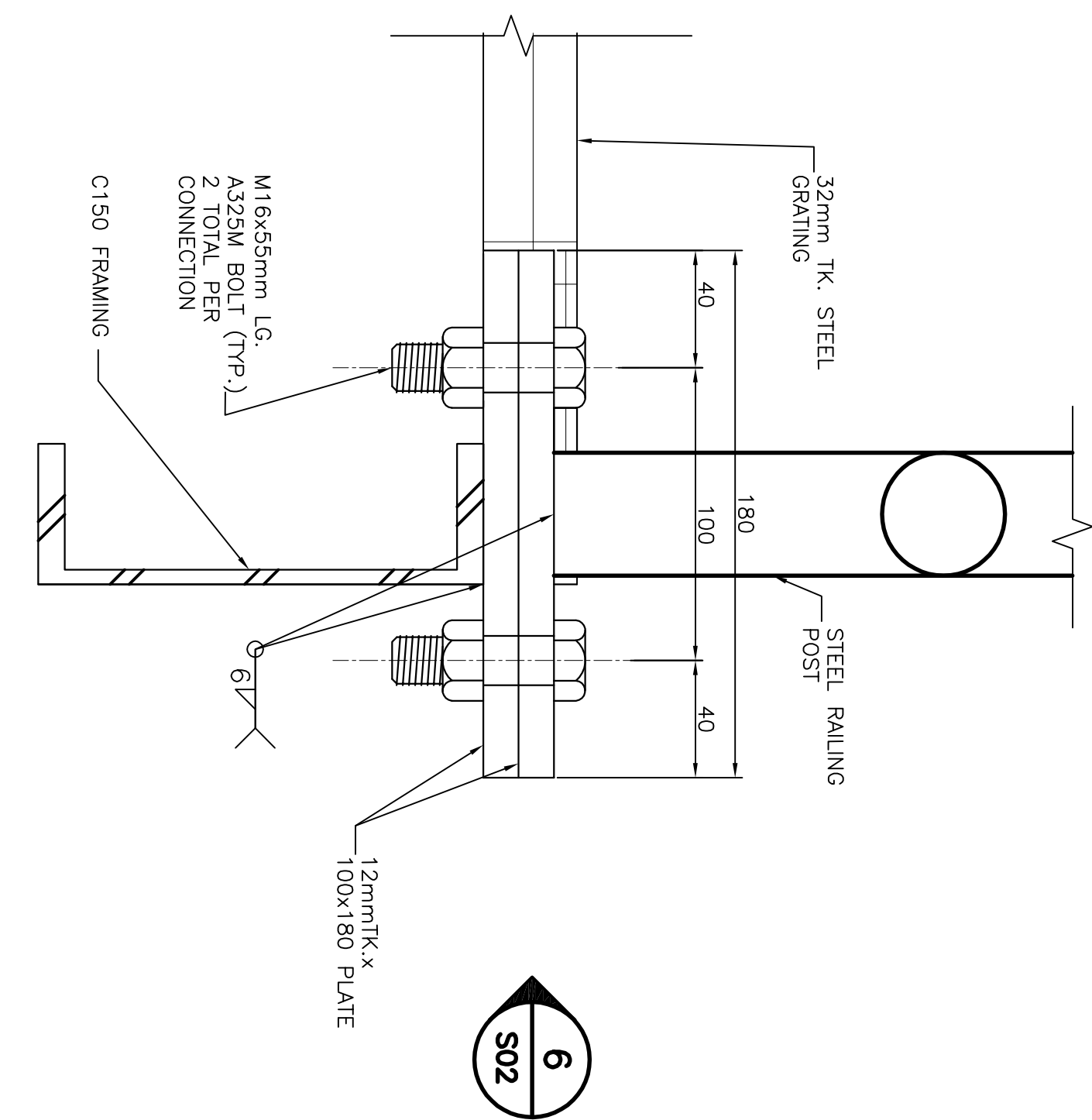
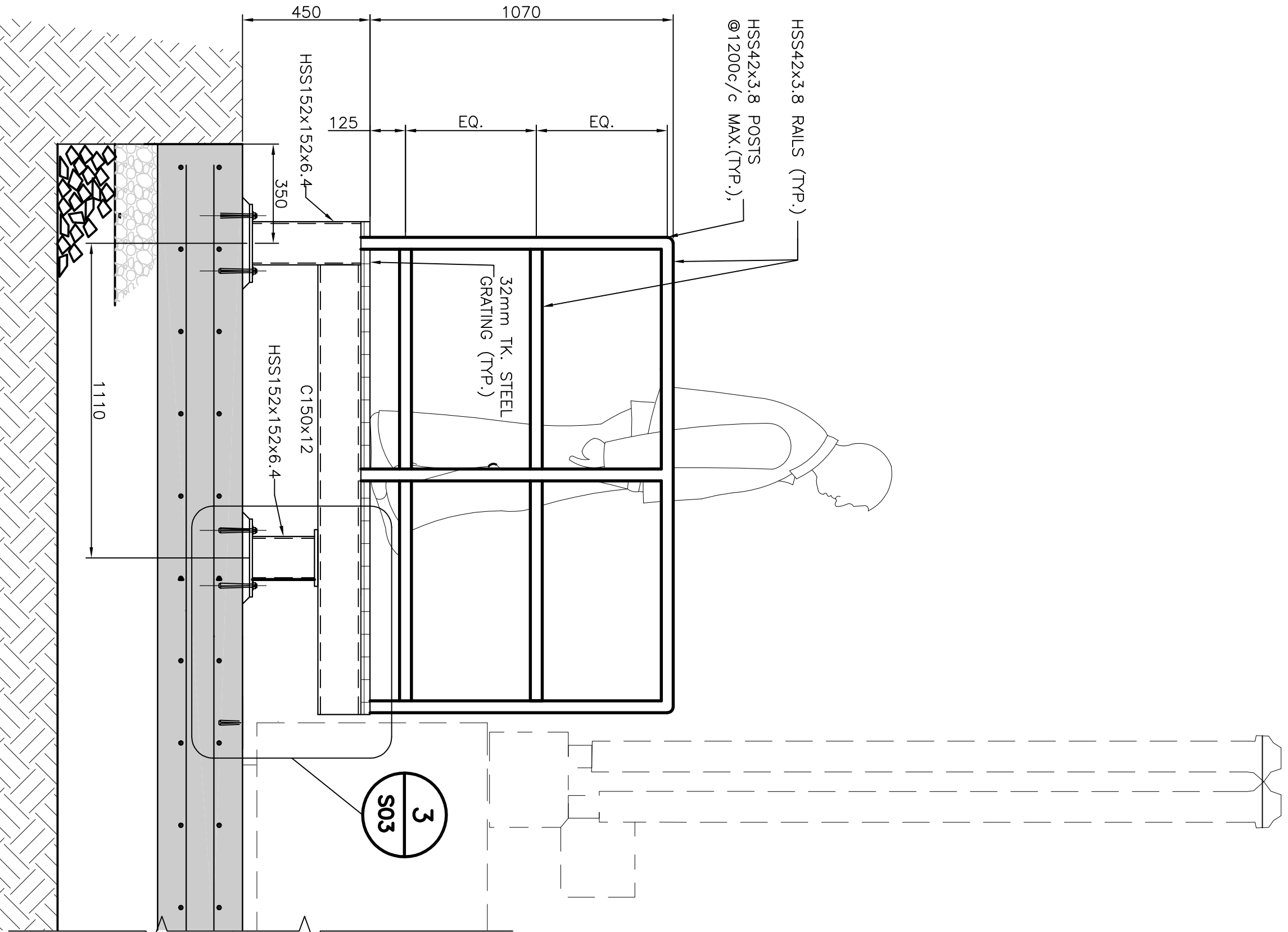
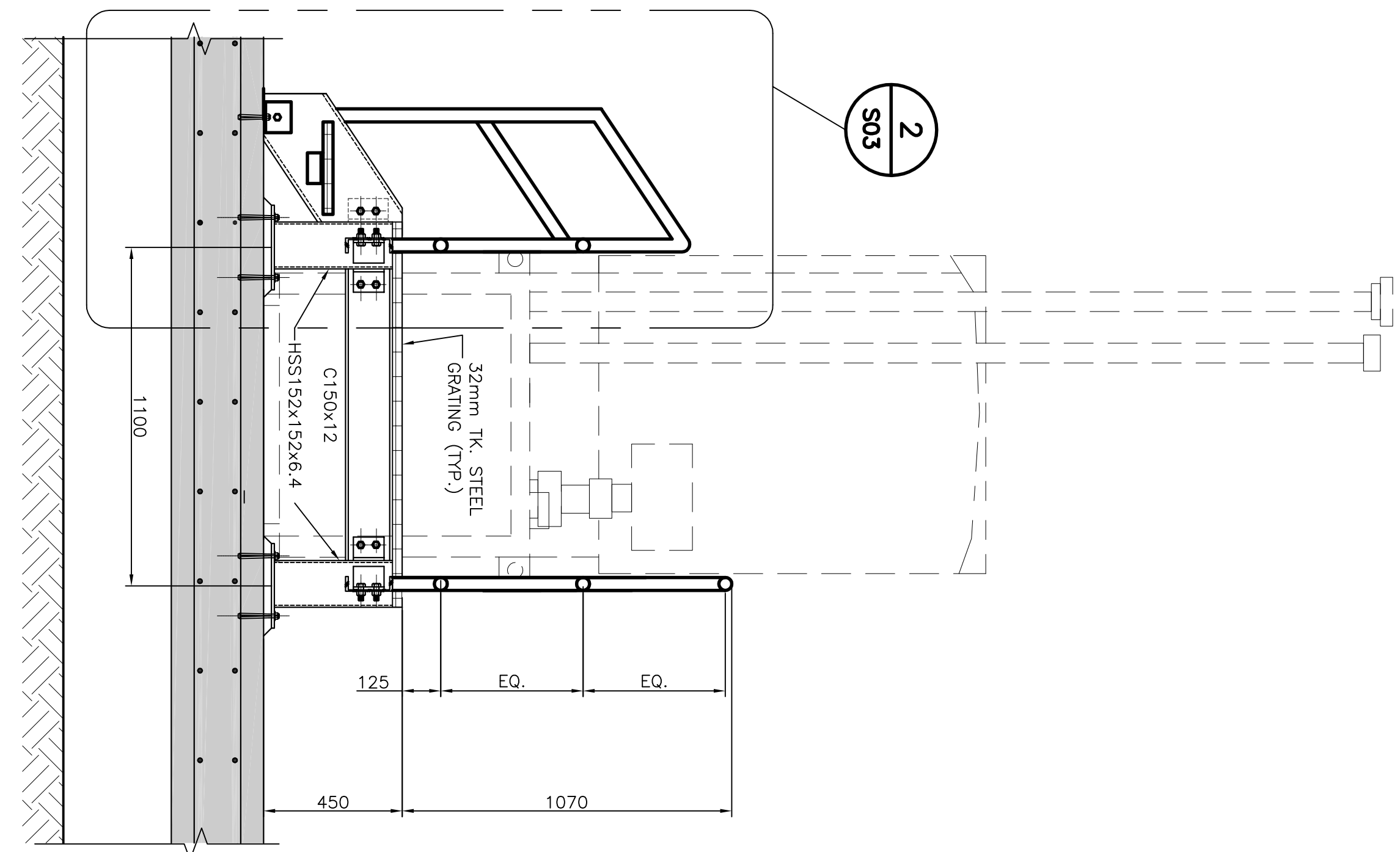


TYPICAL REMOVABLE HANDRAIL SECTION
SCALE: N.T.S.

7
S02

SECTION
SCALE: N.T.S.

1
S02



PROFESSIONAL ENGINEER
REGISTERED
JONATHAN WONG
05/MAY/20
2008
173
JONATHAN WONG
05/MAY/20
2008
173
JONATHAN WONG
05/MAY/20
2008
173

1	REVISED PROJECT No. & RE-ISSUED FOR TENDER	05/05/20
0	ISSUED FOR TENDER	25/03/20
B	ISSUED FOR REVIEW	18/03/20
A	ISSUED FOR REVIEW	18/05/18

EMERGENCY GENERATOR SYSTEM FOR SEARCH AND RESCUE STATION
PORT AUX CHOIX, NL

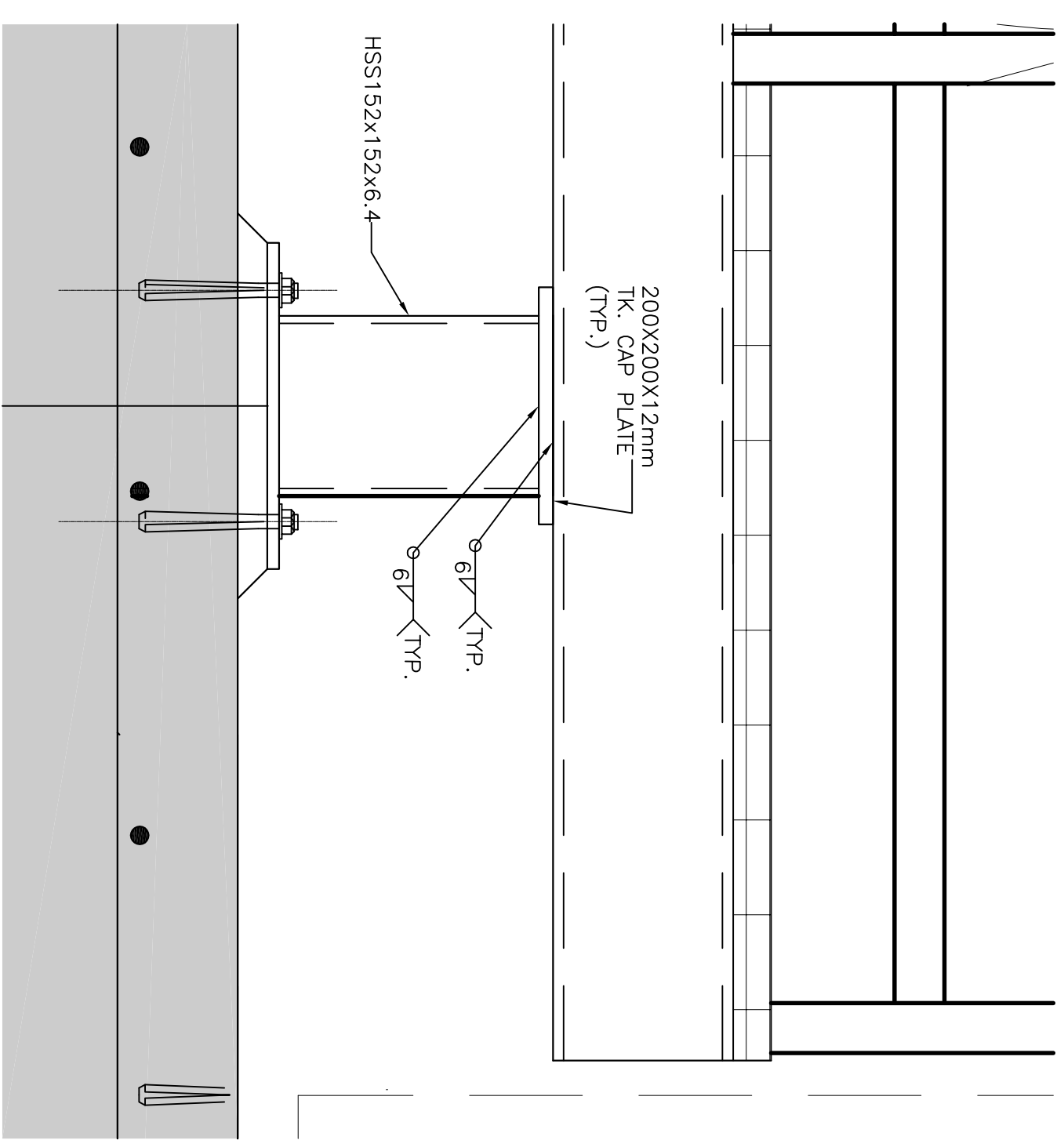
GENERATOR SYSTEM CONCRETE PAD & ACCESS PLATFORM SECTIONS (ADMIN BUILDING)

designed JMW
date MAY 2020
drawn SB
date MAY 2020
approved JMW

Project Manager
F6879-201000

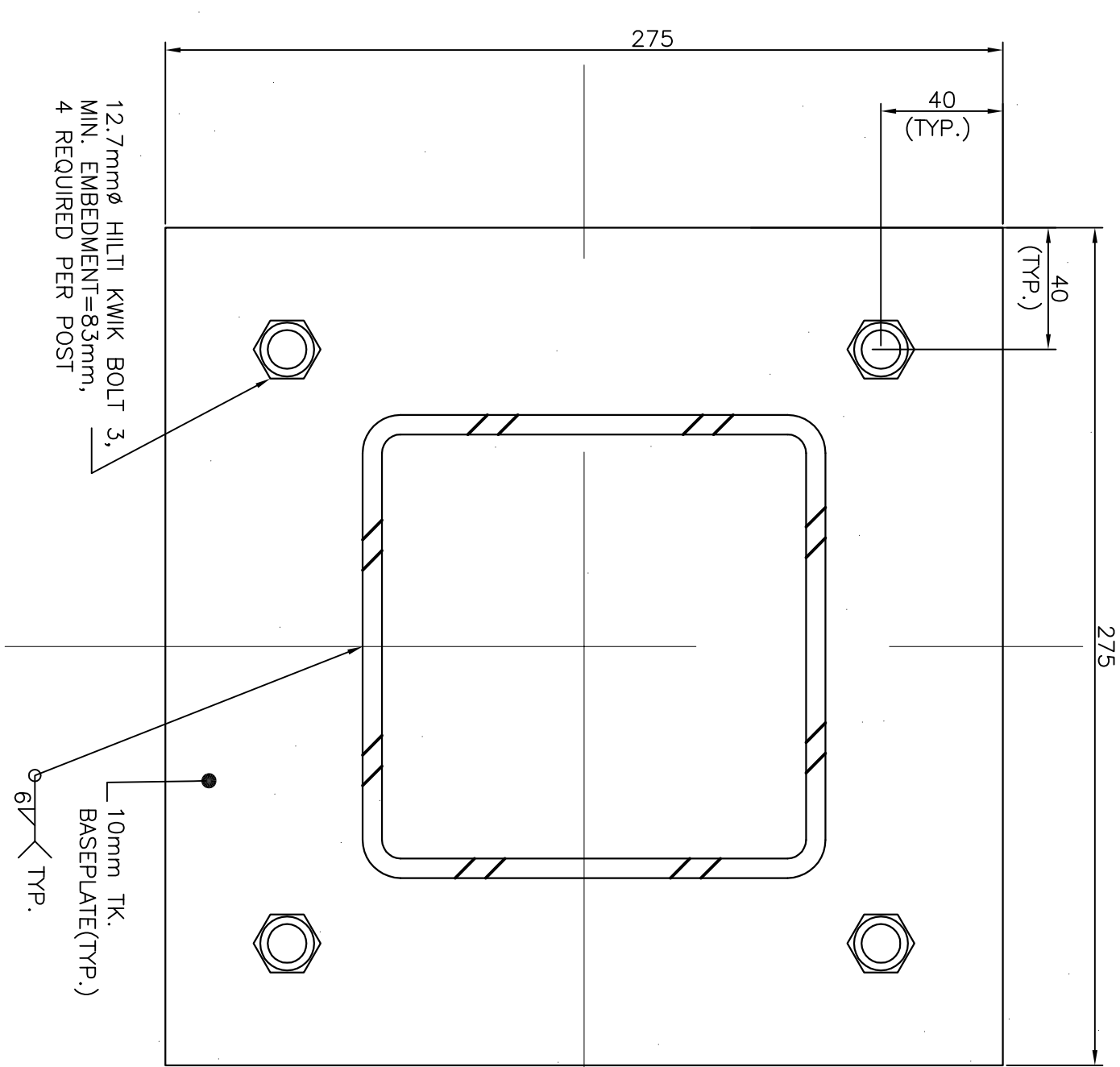
drawing no. 1211101H004S02

- NOTES
1. ALL MEASUREMENTS TO BE IN MILLIMETERS UNLESS OTHERWISE NOTED.
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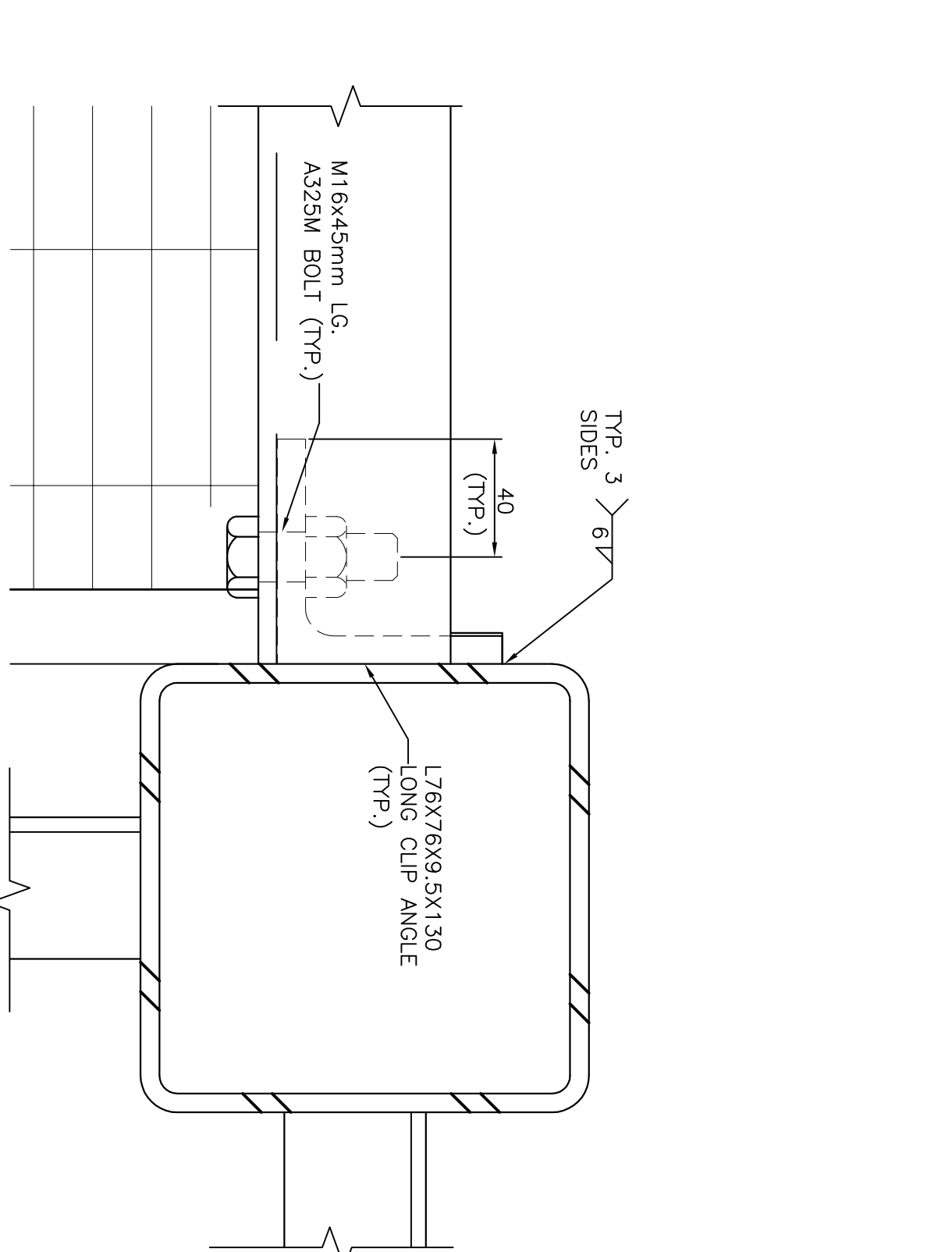
DETAIL
SCALE: N.T.S

SCALE: N.T.S



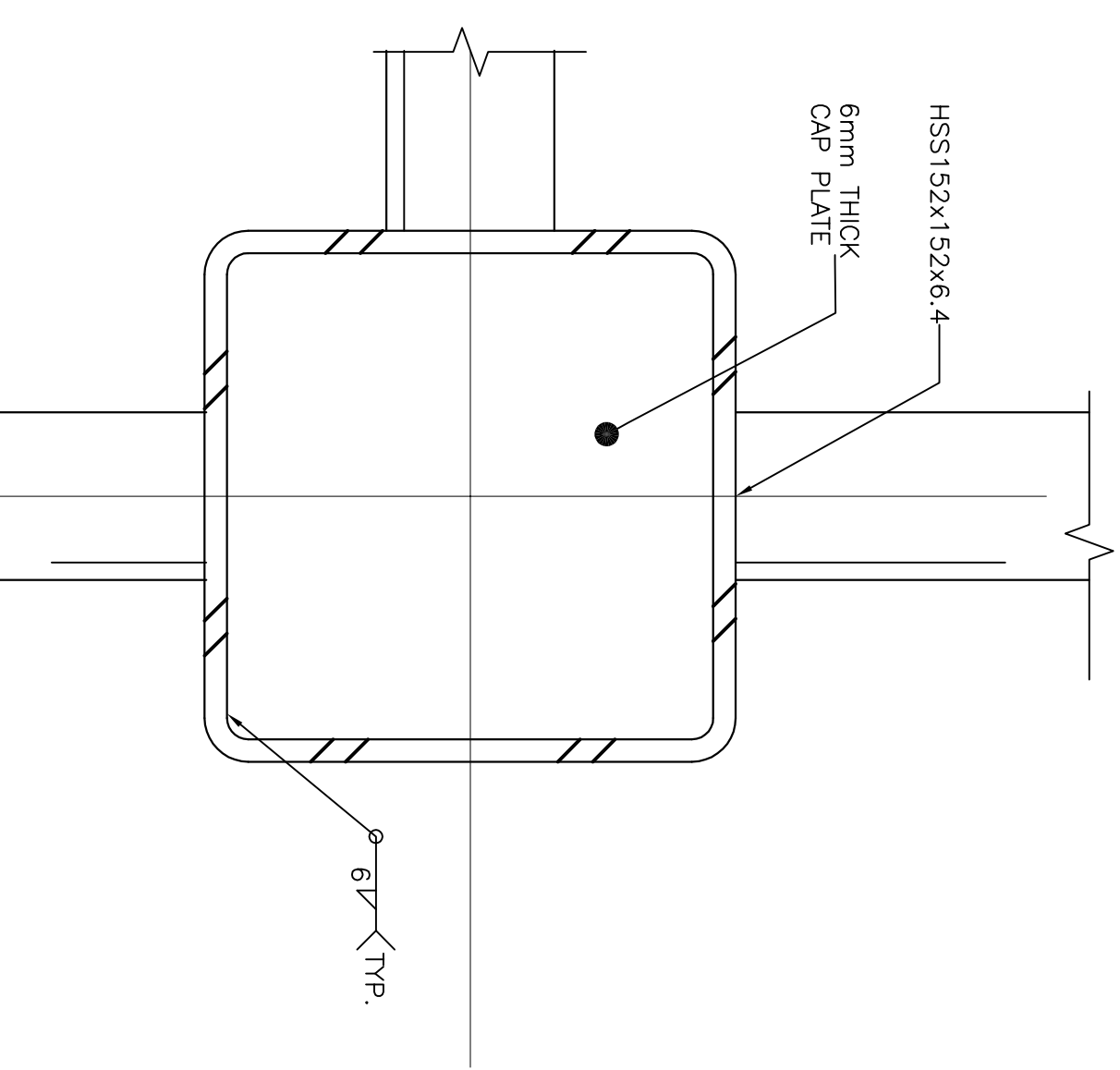
TYPICAL BASEPLATE DETAIL

SCALE: N.T.S



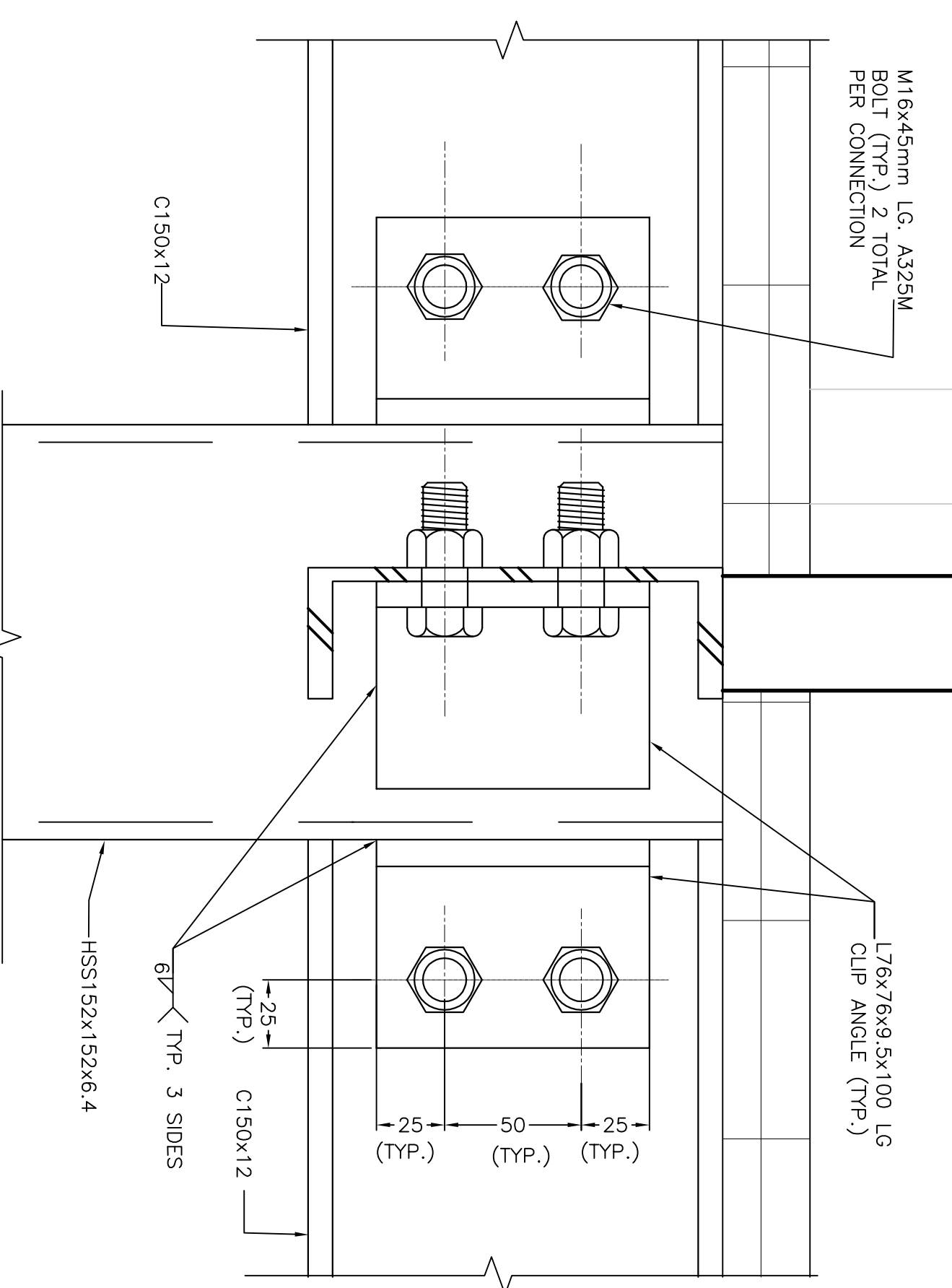
DETAIL

SCALE: N.T.S



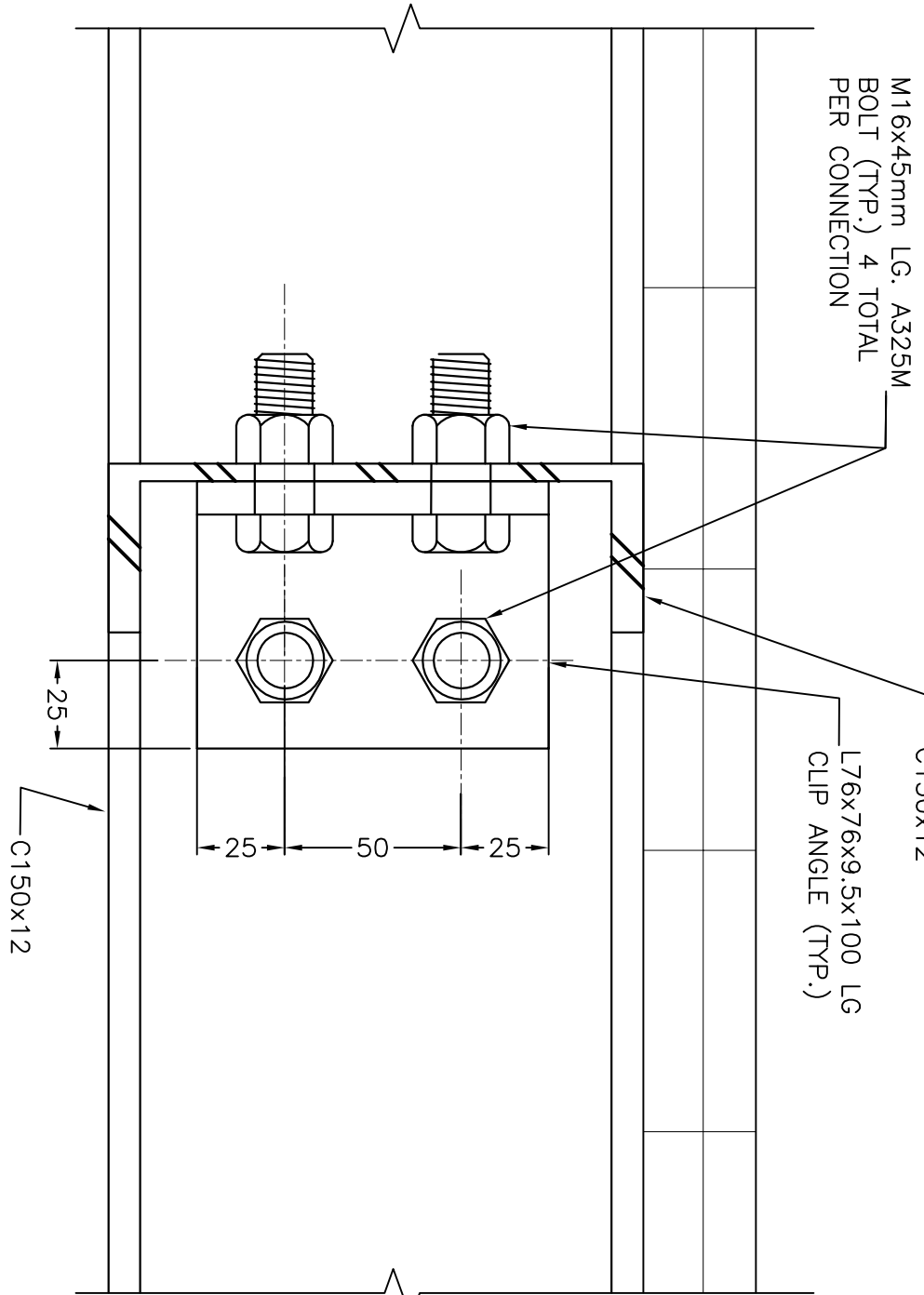
TYPICAL CAP PLATE DETAIL

SCALE: N.T.S



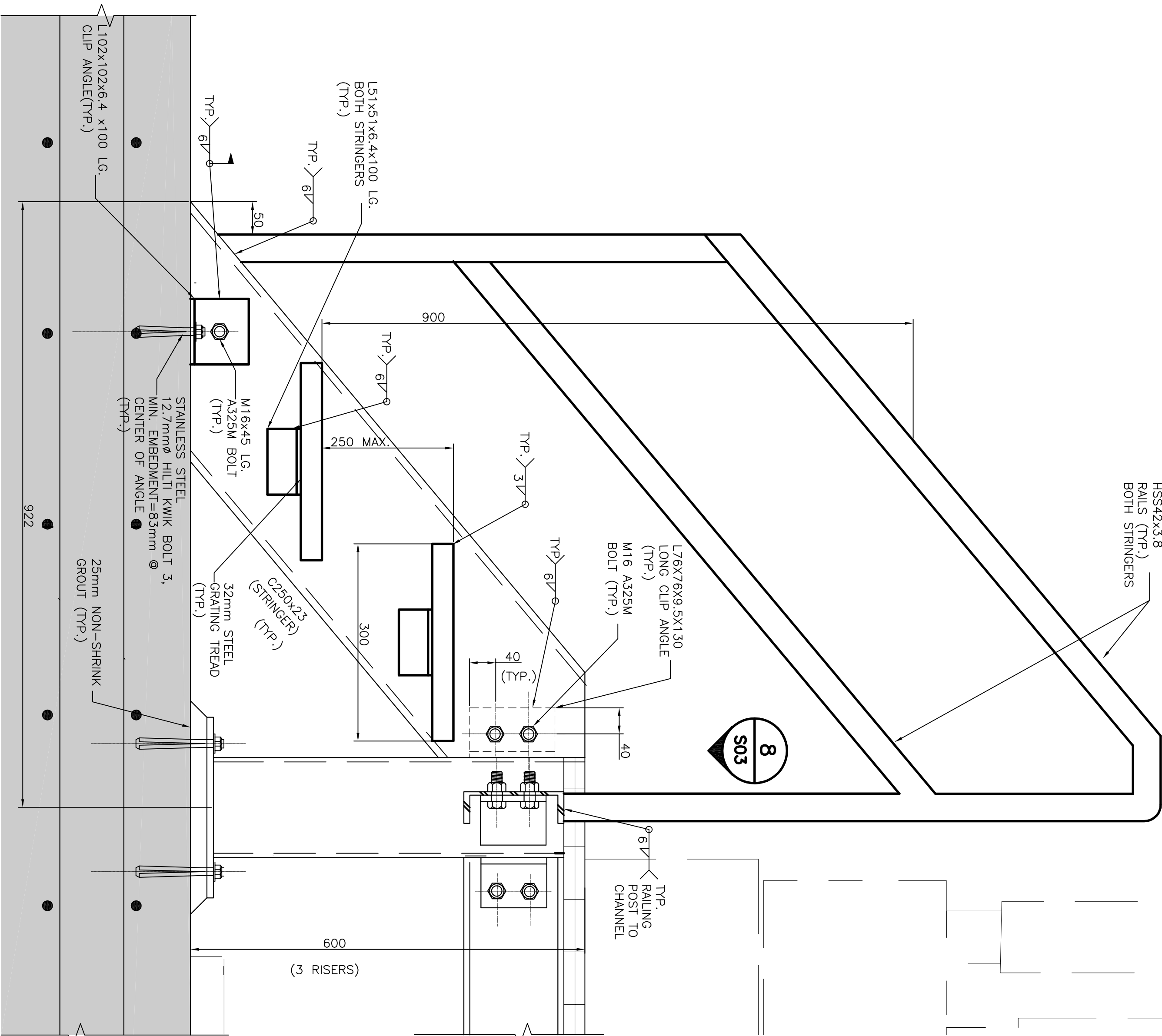
TYPICAL CHANNEL TO COLUMN CONNECTION DETAIL

SCALE: N.T.S



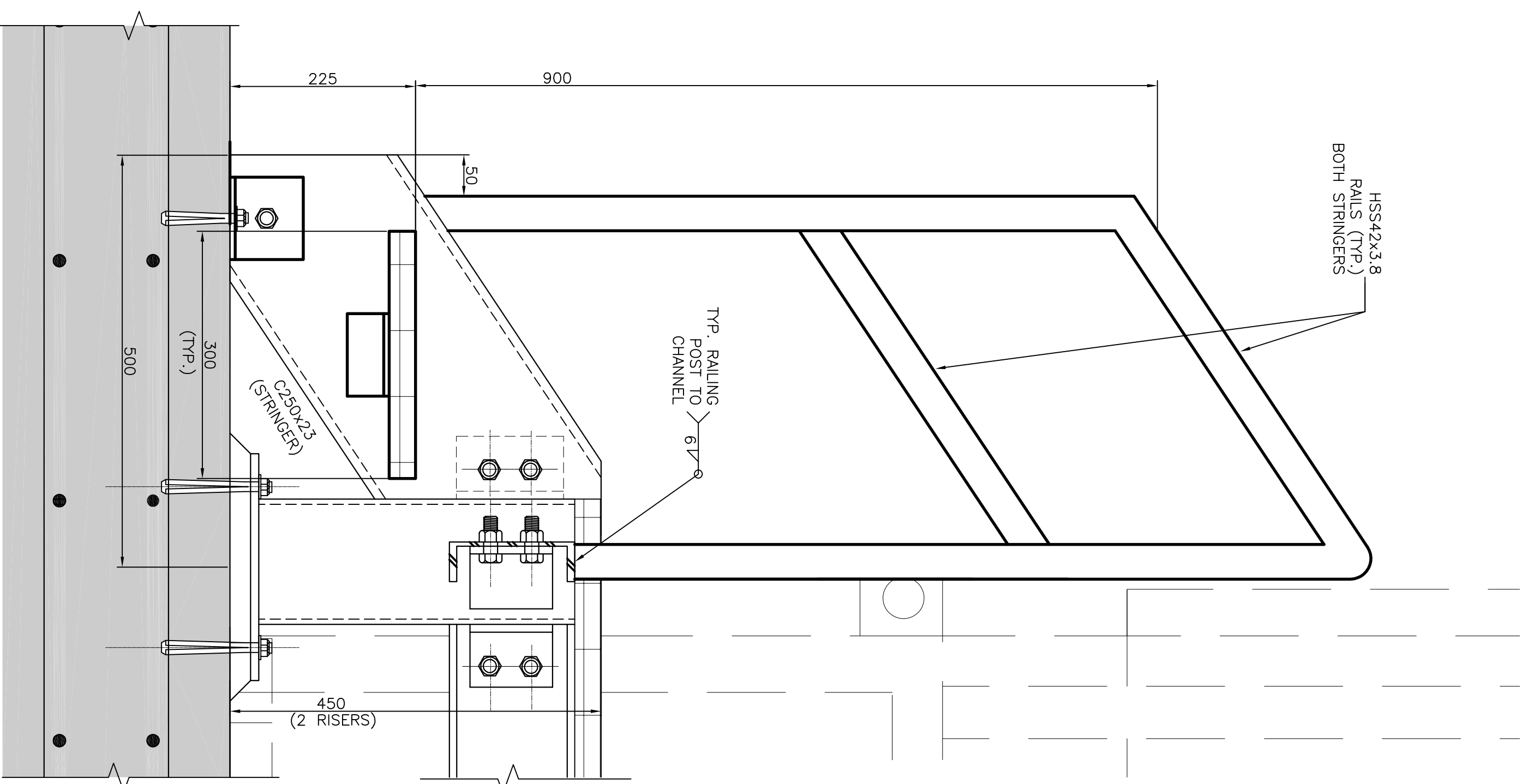
TYPICAL CHANNEL TO CHANNEL CONNECTION DETAIL

SCALE: N.T.S



DETAIL

SCALE: N.T.S



DETAIL

SCALE: N.T.S

NOTES

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SWAP



PROJECT INFORMATION	
PROJECT NO.	121101H004504
PROJECT NAME	EMERGENCY GENERATOR AND FUEL TANK ACCESS PLATFORM COLUMN, BASEPLATE AND CONCRETE PAD PLAN-GARAGE
DESIGNED BY	JW
CHECKED BY	SB
DATE	MAY 2020
APPROVED BY	JW

1		RE-DESIGNED PROJECT NO. & RE-ISSUED FOR TENDER	05/05/20
0		ISSUED FOR TENDER	25/03/20
B		ISSUED FOR REVIEW	18/03/20
A		ISSUED FOR REVIEW	18/05/18
revisions			date (DD/MM)

DESIGNER'S SIGNATURE	
DESIGNED BY	JW
CHECKED BY	SB
DATE	MAY 2020
APPROVED BY	JW

GENERATOR SYSTEM CONCRETE PAD & ACCESS PLATFORM PLANS (GARAGE)

PROJECT INFORMATION	
PROJECT NO.	121101H004504
PROJECT NAME	EMERGENCY GENERATOR AND FUEL TANK ACCESS PLATFORM COLUMN, BASEPLATE AND CONCRETE PAD PLAN-GARAGE
DESIGNED BY	JW
CHECKED BY	SB
DATE	MAY 2020
APPROVED BY	JW

CONCRETE NOTES

1. CONCRETE MATERIALS, METHODS OF CONCRETE CONSTRUCTION, INCLUDING FASTENER TO MEET LATEST EDITIONS OF CSA STANDARDS, 28 DAYS FOR ALL CONCRETE.
2. ALL CONCRETE COMPRESSIVE STRENGTH TO BE MIN. 30MPa AT 28 DAYS FOR ALL CONCRETE.
3. REBAR TO CONFORM TO CSA G30.18 FY=400 MPa.
4. ALL BAR BENDING DETAILING AND PLACING TO ACI DETAILING MANUAL (ACI 318-08-04), UNLESS NOTED OTHERWISE.
5. ALL CONCRETE SHALL BE CAST AND CURED TO MATCH HORIZONTAL AND VERTICAL STEEL, UNLESS NOTED OTHERWISE.
6. CONCRETE COVER TO BE 75mm U.N.O. COVER IS TO BE ACHIEVED BY USING CONCRETE COVER CHAIRS.
7. CONCRETE COVER CHAIRS TO BE USED TO MAINTAIN COVER REQUIREMENTS FOR CASTING IN-PLACE CONCRETE SHOULD BE FOLLOWED.
8. NEW CONCRETE PAD IS NOT TO BE SUBJECTED TO LOADING UNTIL THEY REACH THEIR SPECIFIED COMPRESSIVE DESIGN STRENGTH OR AFTER 28 DAYS.
9. CONCRETE PAD IS DESIGNED FOR A TOTAL MASS OF 10,425 LBS.

STRUCTURAL SLAB CAST ON GRADE NOTES

1. PROOF ROLL AND COMPACT SUBGRADE TO 98% SAND.
2. ANY OPENING SLABS NOT SHOWN SHALL NOT BE PERMITTED UNLESS APPROVED BY STRUCTURAL CONSULTANT.
3. SEE CONCRETE NOTES, STRUCTURAL PLANS AND DETAILS FOR PLACEMENT DETAILS.

STRUCTURAL STEEL NOTES

1. ALL STRUCTURAL STEEL MATERIALS, FABRICATION, ERECTION, INSPECTION AND TESTING SHALL CONFORM TO THE FOLLOWING STANDARDS: CAN/CSA-S16.1 - LIMIT STATES DESIGN OF STEEL STRUCTURAL MEMBERS C.I.S.C. CODE OF PRACTICE FOR STEEL STRUCTURES.
2. CHANNELS, ANGLES AND PLATES TO CAN/CSA G40.21-M-300M, UNLESS NOTED OTHERWISE.
3. HSS SECTIONS TO CAN/CSA G40.21-M-350W, CLASS 'C' UNLESS NOTED OTHERWISE.
4. ALL BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325M, BEARING TYPE, UNLESS NOTED OTHERWISE.
5. ANCHOR BOLTS TO BE SLAG TIGHT XXTYPE.
6. WELDING TO BE METAL-ARC WELDING TO CSA W59 AND SHALL BE UNDERGOWN ONLY BY FABRICATORS AND ERECTORS APPROVED BY THE CANADIAN WELDING BOARD TO THE REQUIREMENTS OF CSA W47.1, A QUALIFIED WELDER AS PER CSA W47.1 AND W59. INSPECTIONS ARE TO BE AS FOLLOWS:
7. • FILLET WELDS: 100% VISUAL, 20% MPI.
8. • ALL STEEL TO BE HOT DIPPED GALVANIZED.
9. • CARBON STEEL SECTIONS TO BE 32 MPa NON SPRINK GROUT.
10. BUILD-UP AND POSSIBLE FROST DAMAGE.
11. ALL BOLTED CONNECTIONS SHALL HAVE A MINIMUM OF TWO BOLTS IN EACH CONNECTED PIECE AND BE DESIGNED WITH BEARING-TYPE CONNECTIONS.
12. THERE SHALL BE NO CUTTING OF THE STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT PRIOR WRITTEN APPROVAL OF THE STRUCTURAL CONSULTANT.

CALCULATION CRITERION (PER NBCC 2010)

- NOTE: ALL LOADS SPECIFIED BELOW ARE UNFACTORED.

DEAD LOADS:

STEEL GRATING AND FRAMING SELF WEIGHT

LIVE LOAD:

- SLAB: 4.8 kPa

- PLATFORM: 4.8 kPa

- SNOW LOAD: PORT AUX CHOIX, NL

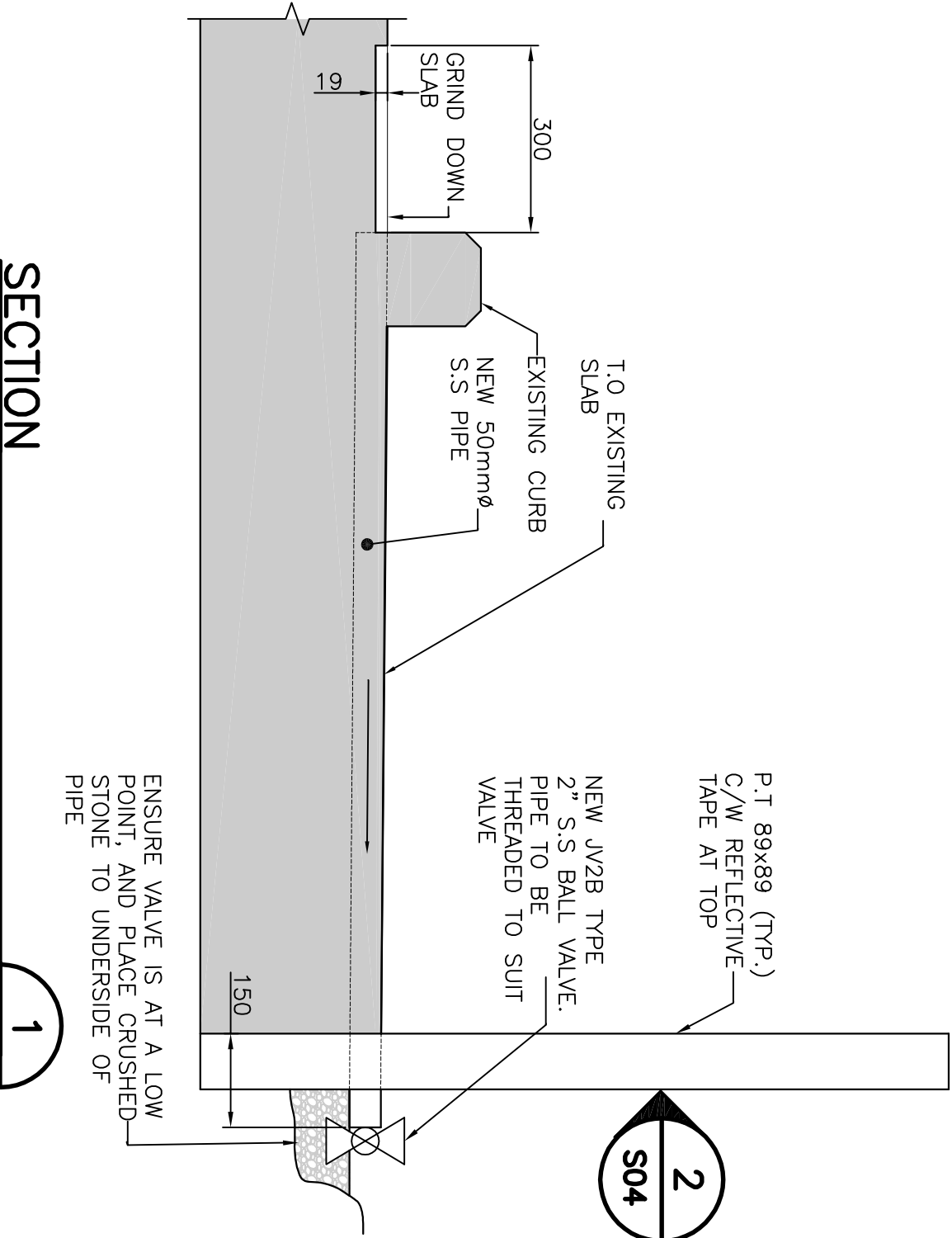
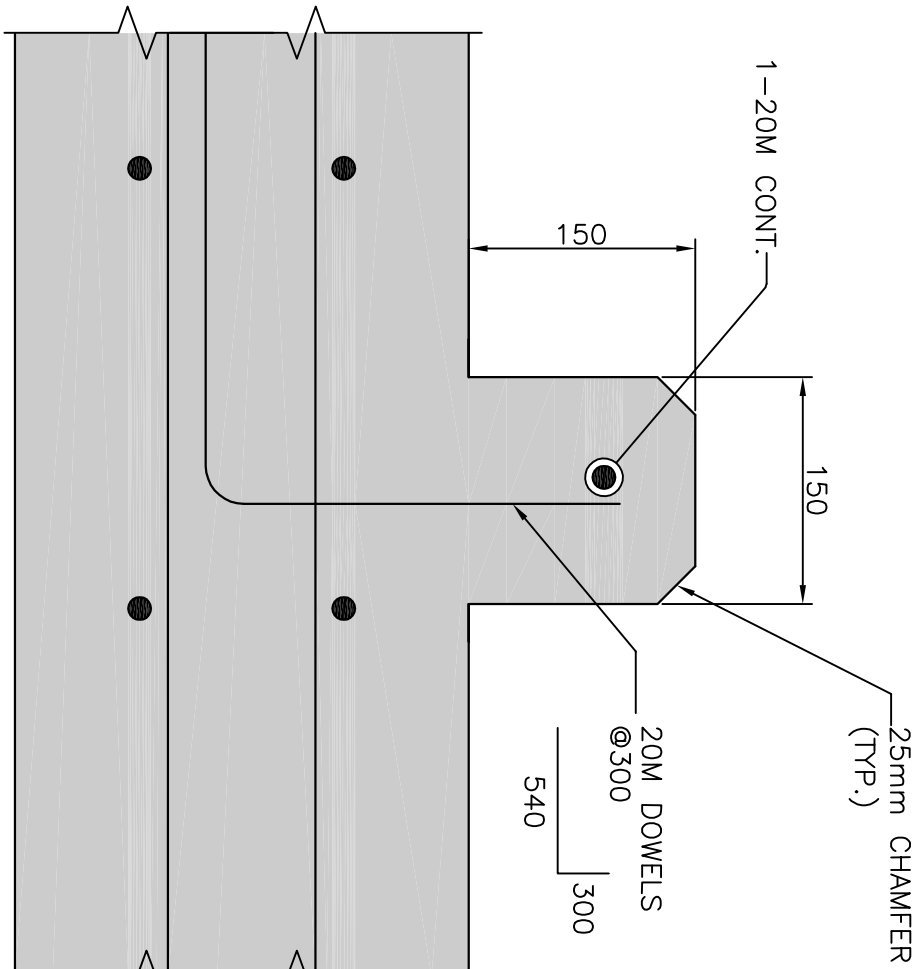
- SLAB: 3.48 kPa

GRATING NOTES

1. USE FISHER & ULDOW SPERRATED TAIL-WELD SURFACE GRATING FOR BETTER GRIP SURFACE OF LOAD BEARING BARS OF GRATING PANELS.
2. GRATING TYPE 30 (METRIC).
3. GRATING TO BE HOT DIPPED GALVANIZED.
4. GRATING TO BE SECURED TO ACCOMMODATE CAP PLATES.
5. GRATING OTHER STRUCTURAL STEEL SECTIONS.
6. BEARING BAR SIZE 32 x 3.2 (mm).
7. PANEL LENGTH TO BE SPECIFIED BY FABRICATOR TO SUIT @ STEEL FRAMING MEMBER.
8. EACH GRATING PANEL, AT FASTEN TO STEEL FRAME USING MINIMUM 4 BOLTS.
9. DO NOT PLACE LOADS ON THE GRATING AND STEEL SUPPORTS FRAME THAT IS LARGER THAN THE DESIGN LIVE LOAD NOTED ABOVE.

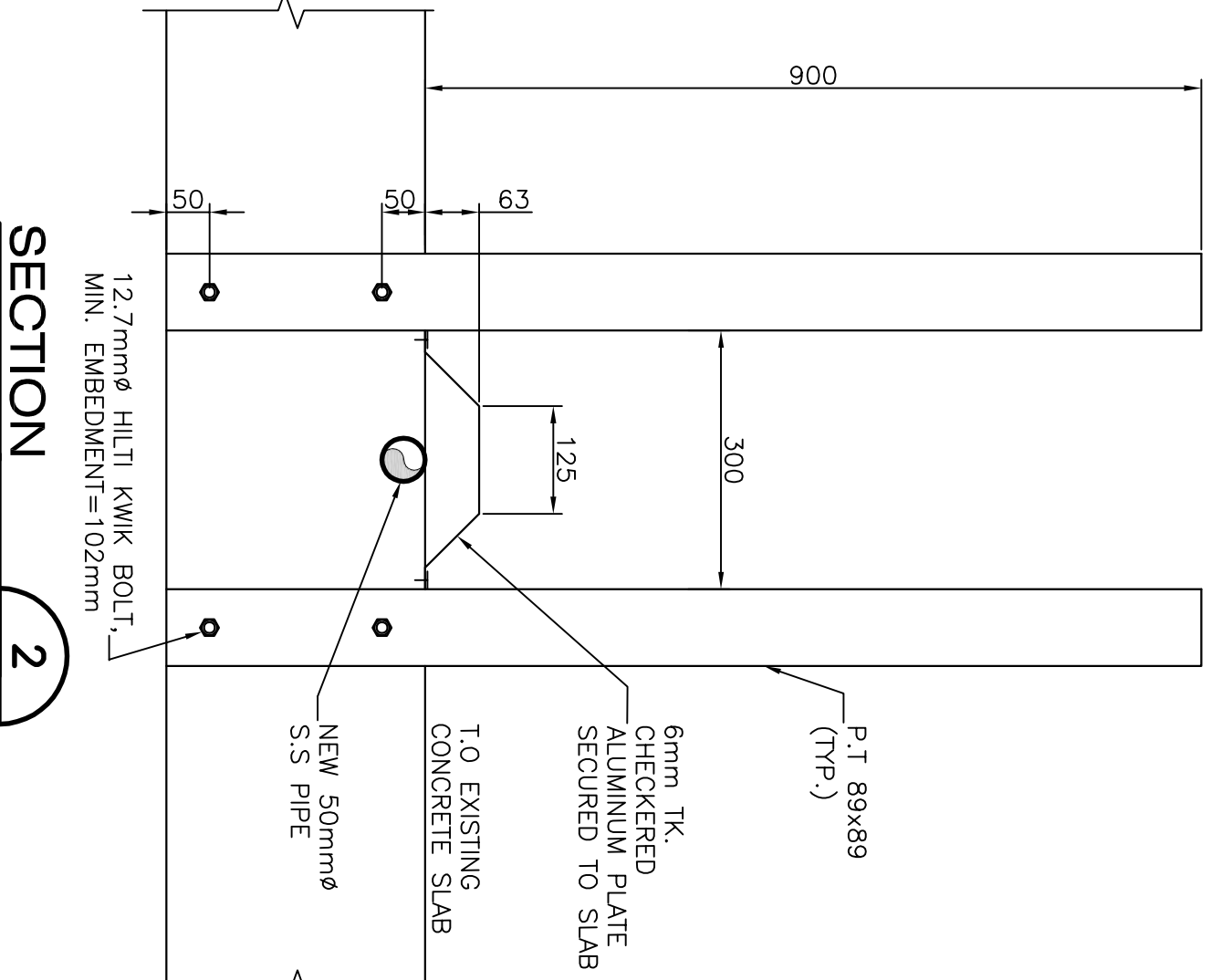
TYPICAL CURB DETAIL

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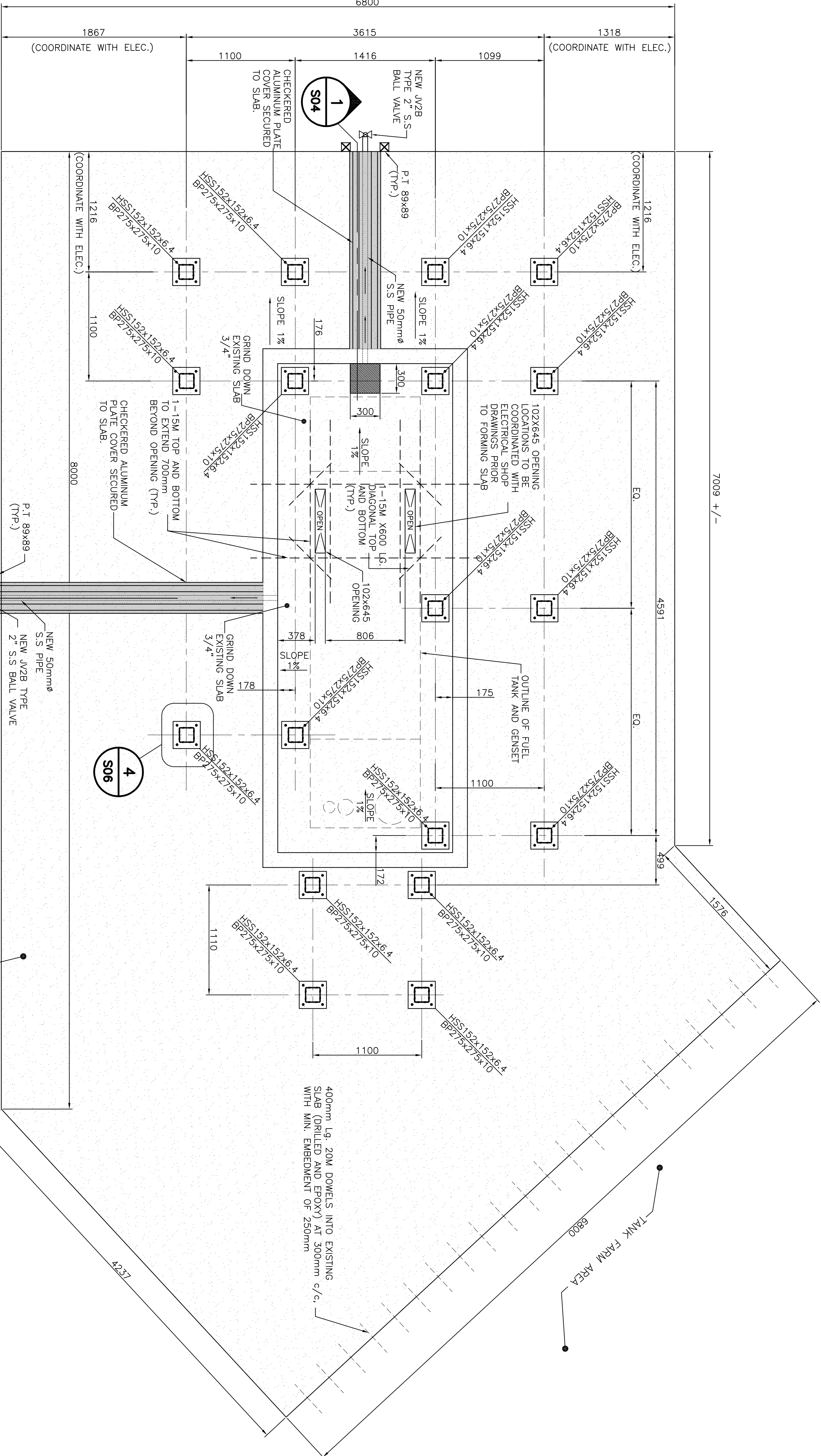
SECTION 1

SCALE: N.T.S.
NOTE: CHECKED ALUMINUM PLATE COVER AND REBAR OMITTED FOR CLARITY.



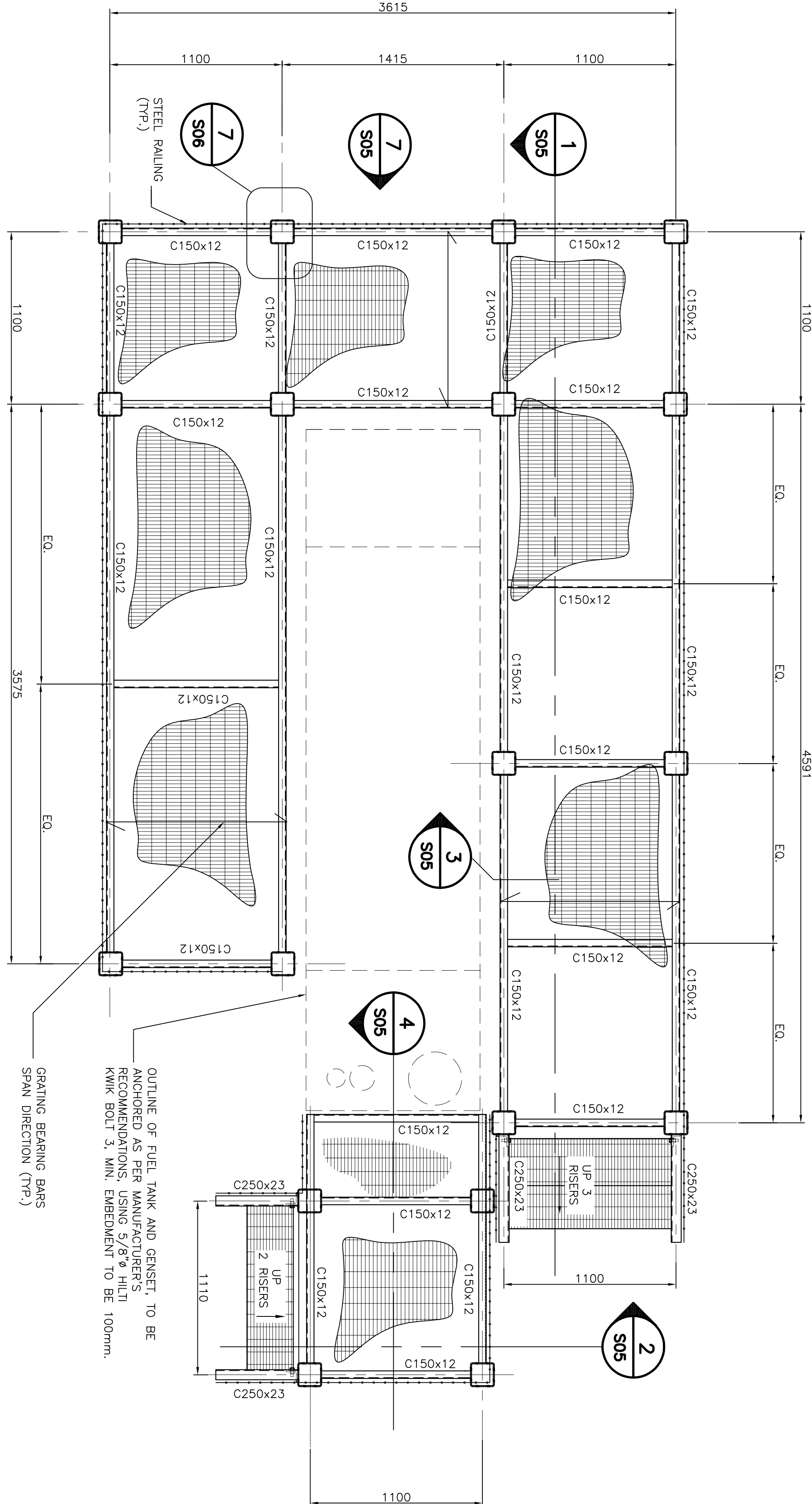
SECTION 2

SCALE: N.T.S.



EMERGENCY GENERATOR AND FUEL TANK ACCESS PLATFORM COLUMN, BASEPLATE AND CONCRETE PAD PLAN-GARAGE

SCALE: N.T.S.
NOTE: CHAINLINK FENCE OMITTED FOR CLARITY, REFER TO ELECTRICAL DRAWINGS.



EMERGENCY GENERATOR AND FUEL TANK ACCESS PLATFORM FRAMING PLAN-GARAGE

SCALE: N.T.S.
NOTE: CONCRETE PAD OMITTED FOR CLARITY.

- NOTES
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 2. DO NOT SCALE DRAWINGS.
 3. VERIFY ALL DIMENSIONS, CONDITIONS AND LIMITATIONS ON SITE BEFORE SUBMITTING TENDER. DISCREPANCIES FOUND THAT MAY IMPACT CONSTRUCTION.

STAMP



PERMIT PROVINCE OF NEWFOUNDLAND AND LABRADOR	
PERMIT HOLDER	FERPIT
THIS PERMIT ALLOWS	MADEIRA ENGINEERING
To construct, Develop, Install, Operate, Maintain, Repair, Replace, Upgrade, Modify, Alter, Extend, Relocate, Demolish, or otherwise use the following structure, equipment, or facility:	
Permit No. 20028	
Issued by Permit Holder (date No.) 20028	
1 REVISED PROJECT No. & RE-ISSUED FOR TENDER	
0	ISSUED FOR TENDER
B	ISSUED FOR REVIEW
A	ISSUED FOR REVIEW
revisions	date
	10/04/17

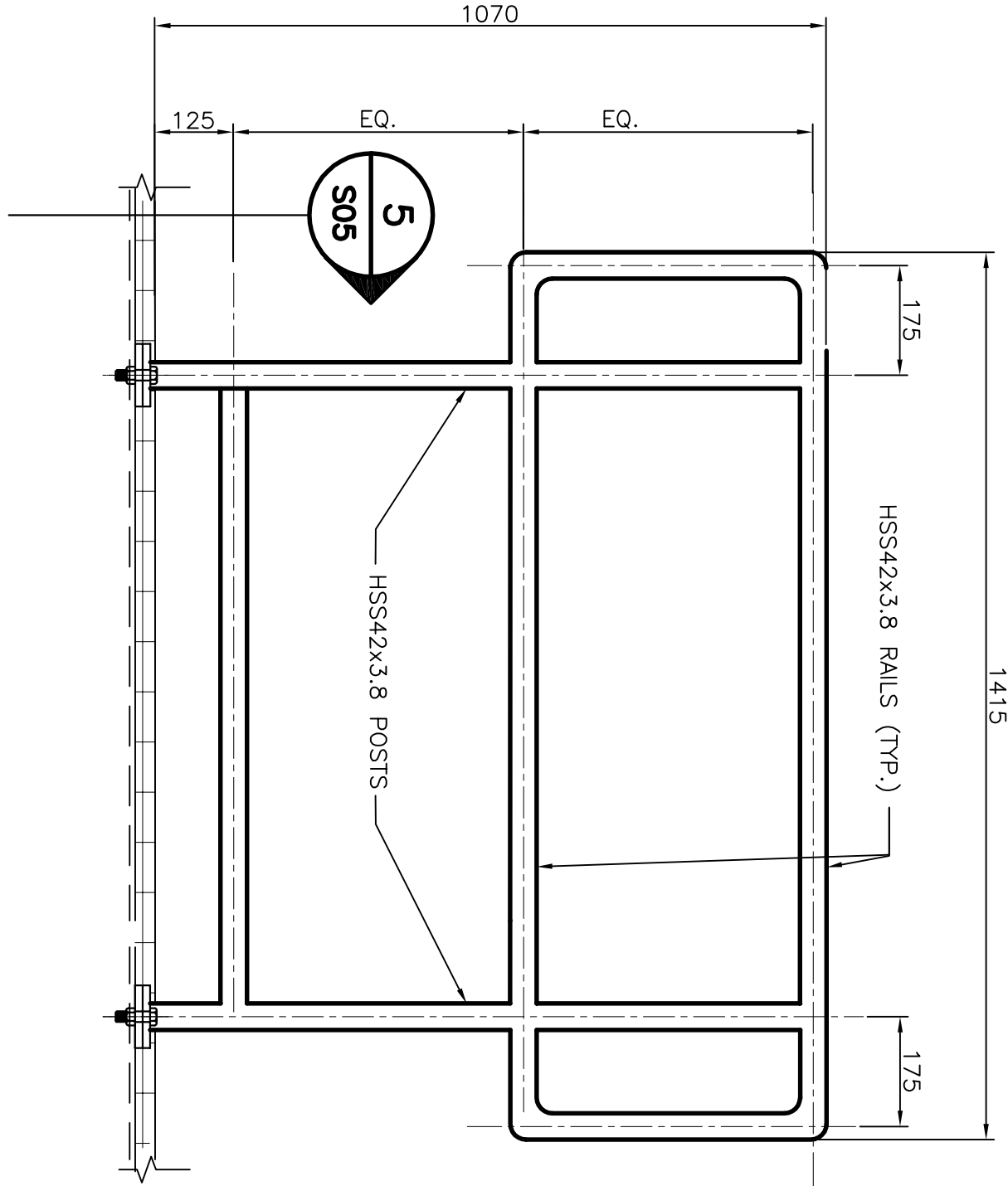
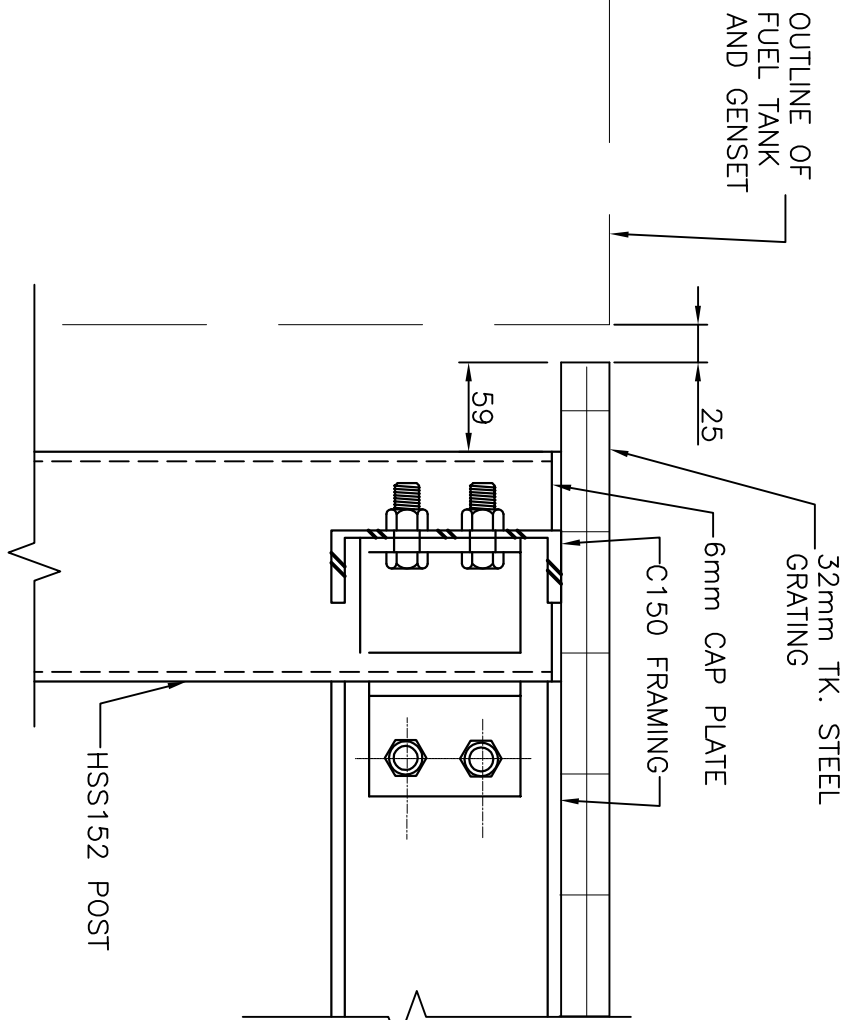
EMERGENCY GENERATOR SYSTEM FOR SEARCH AND RESCUE STATION
PORT AUX CHOIX, NL

GENERATOR SYSTEM CONCRETE PAD & ACCESS PLATFORM SECTIONS (GARAGE)

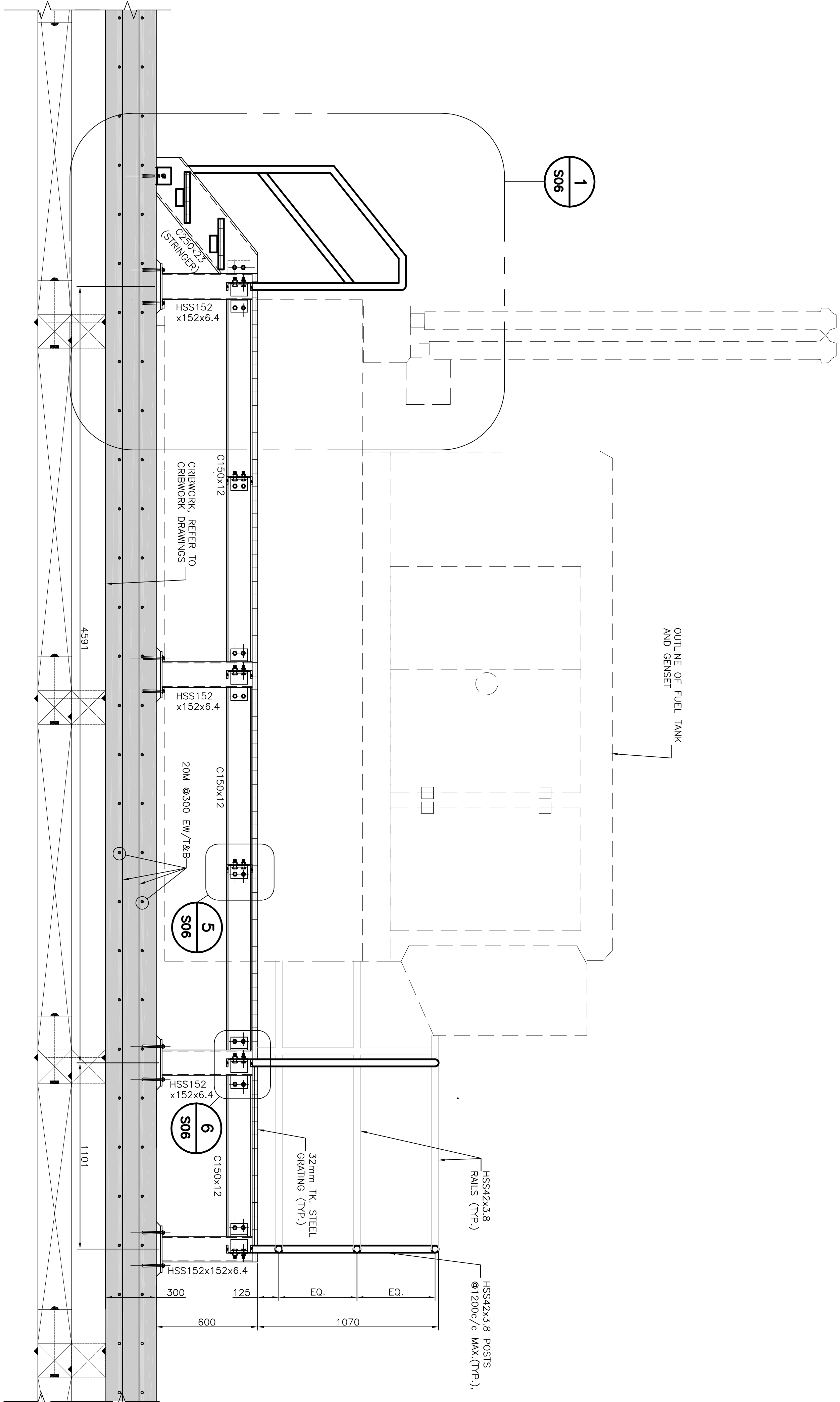
designed	JW	checked	
date	MAY 2020		
drawn	SB	drawing	
date	MAY 2020		
approved	JW	approved	
date	MAY 2020		

Project Manager	no. au projet
Project number	F6879-201000
drawing no.	121101H004S05
no. de dessin	

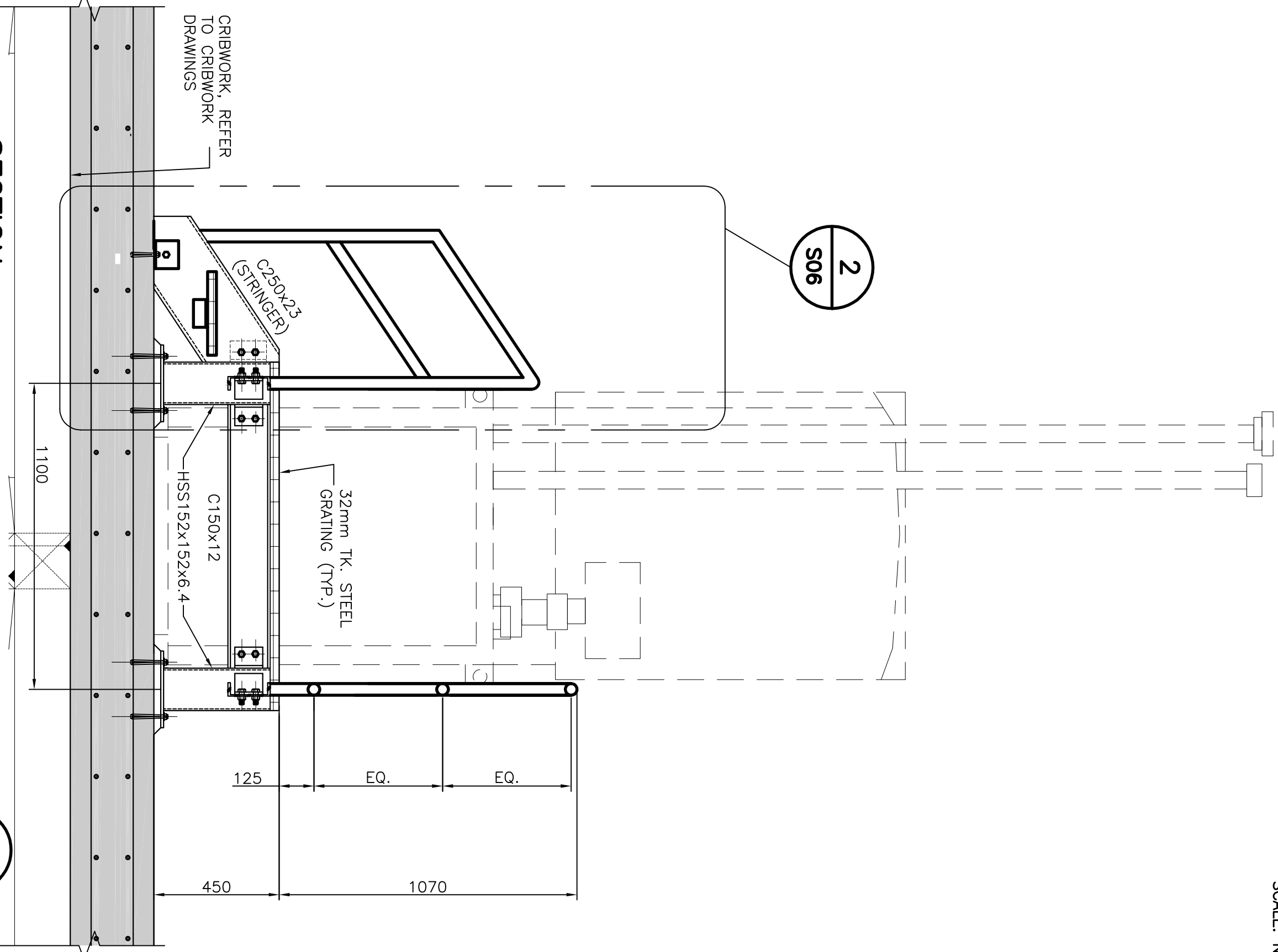
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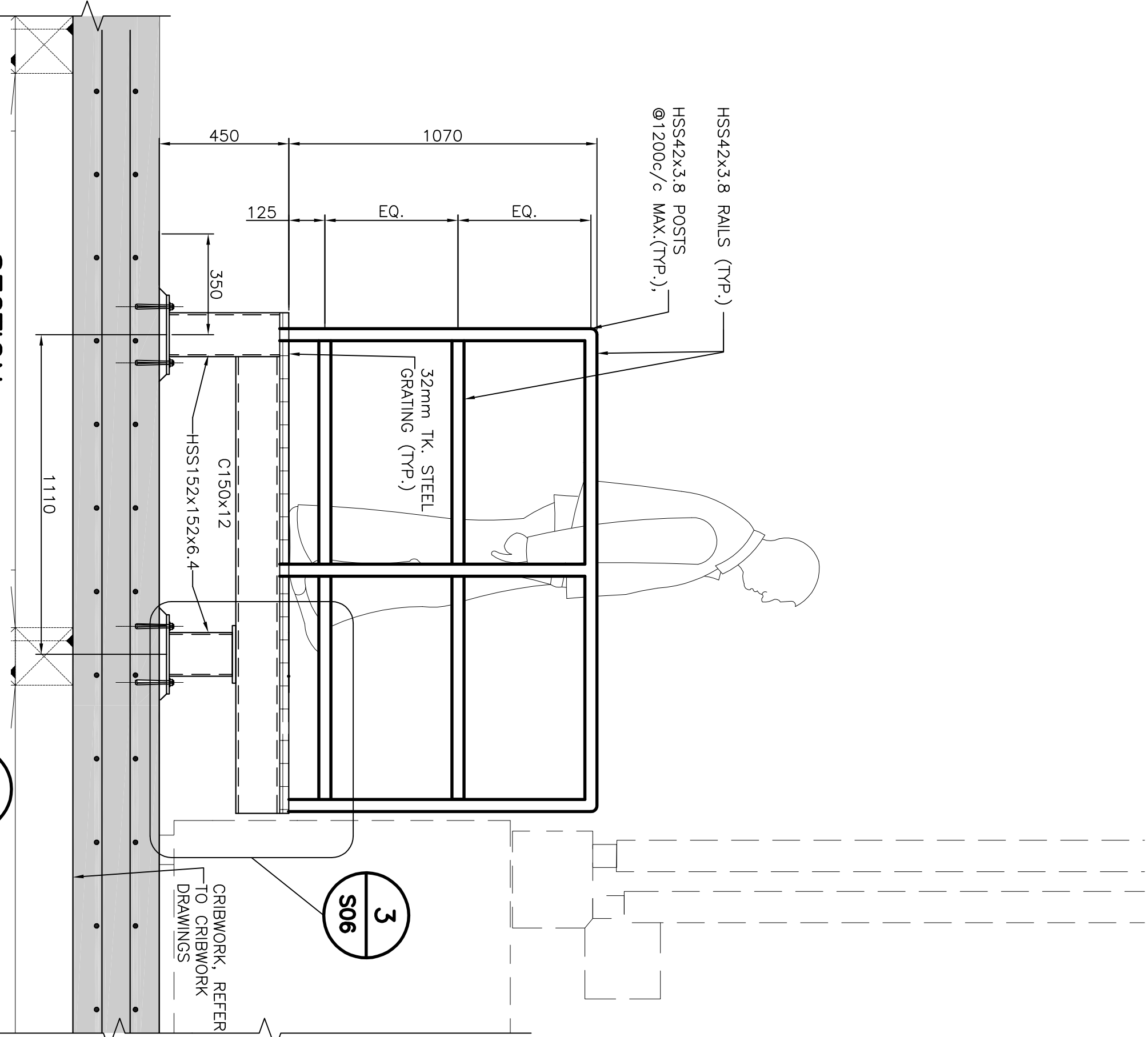
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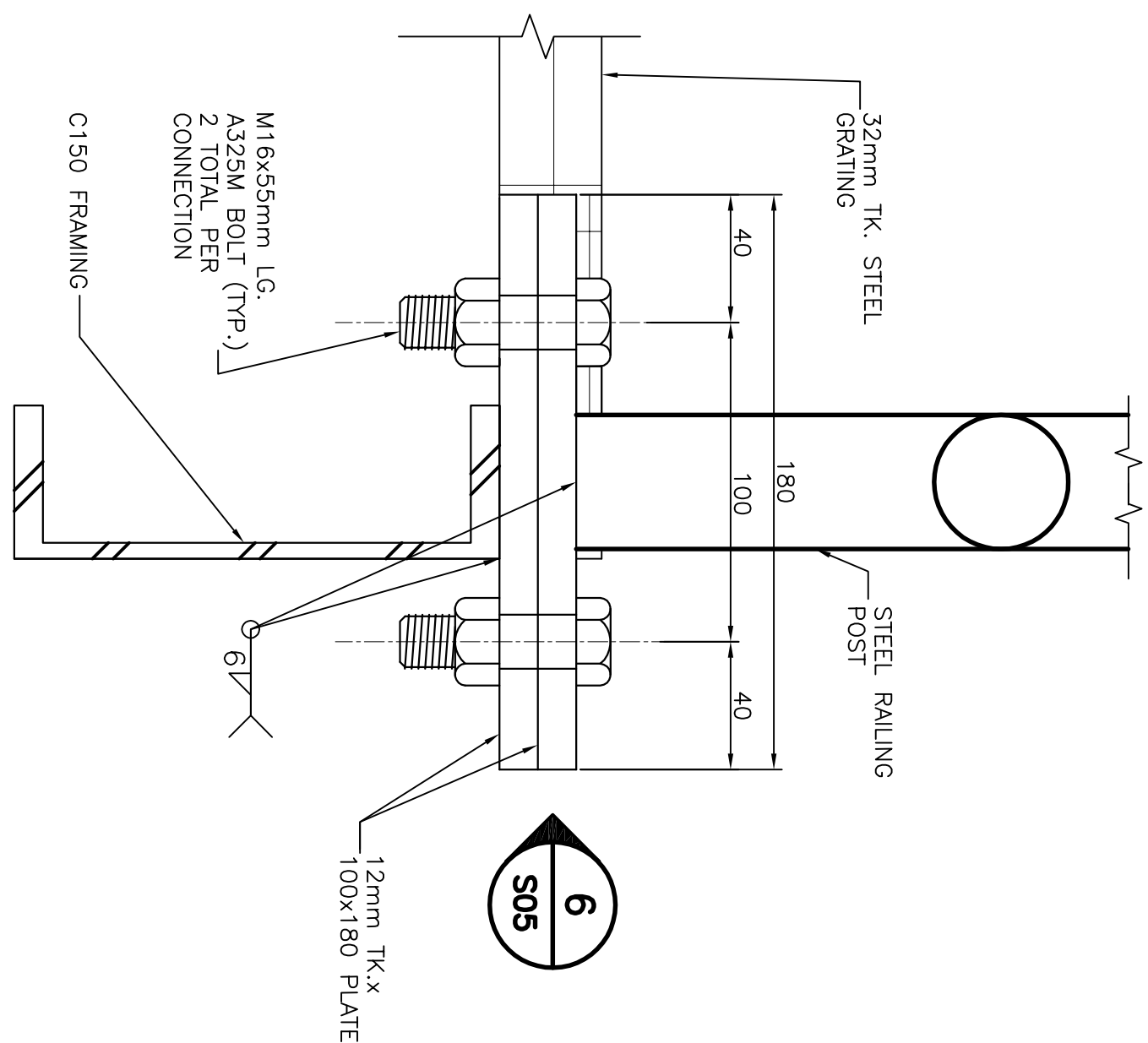
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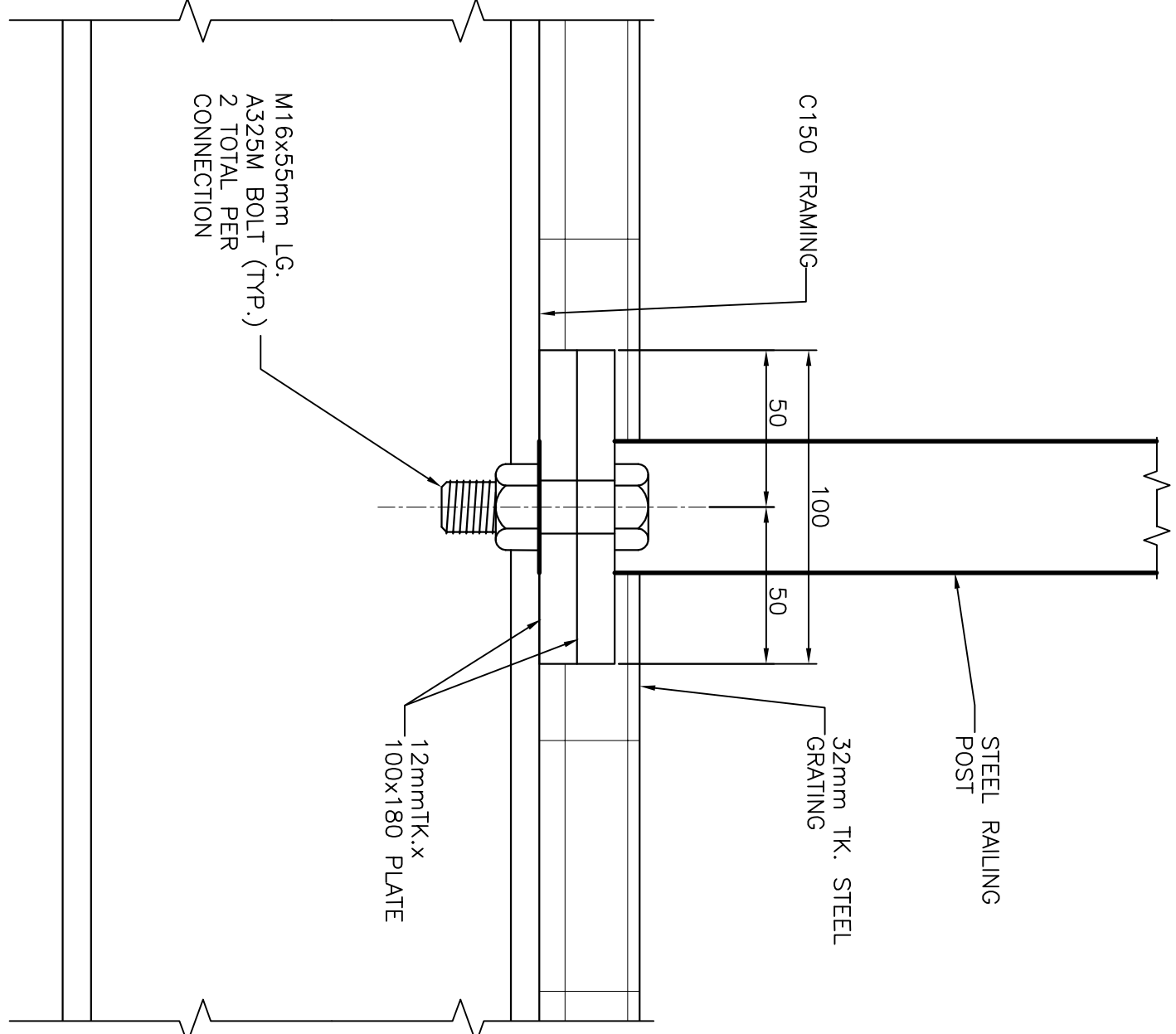
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SECTION
SCALE: N.T.S



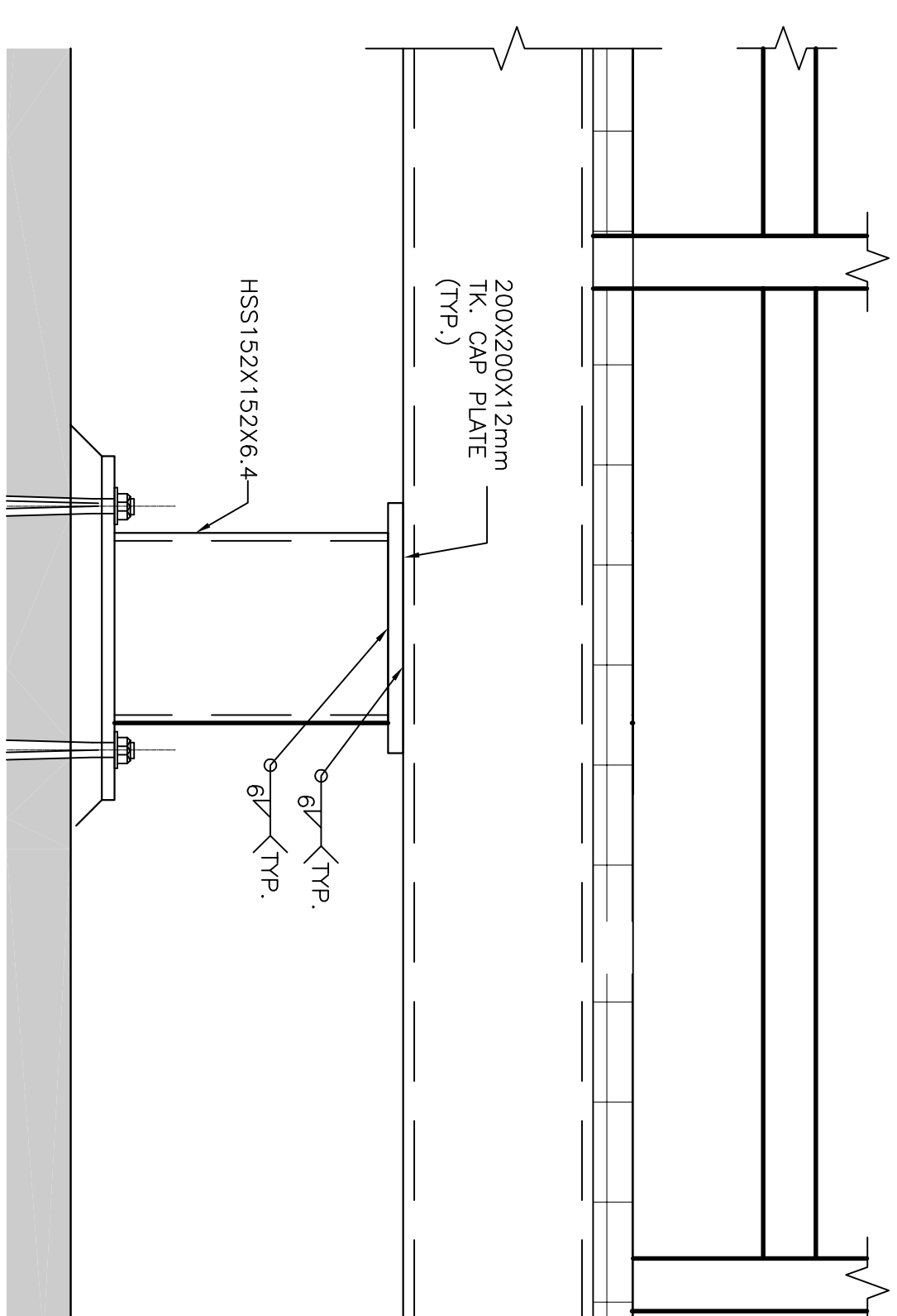
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ELEVATION
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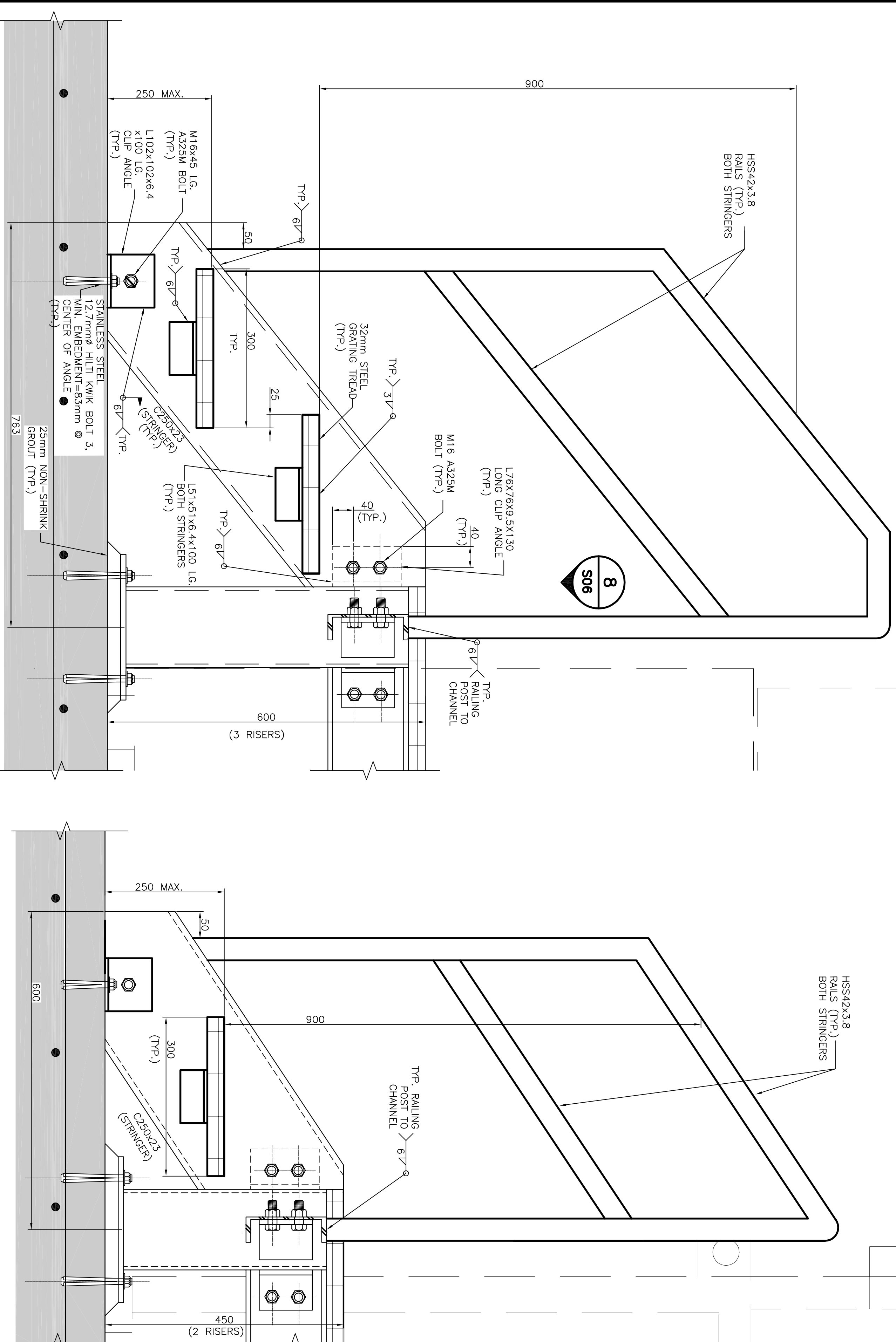
NOTES

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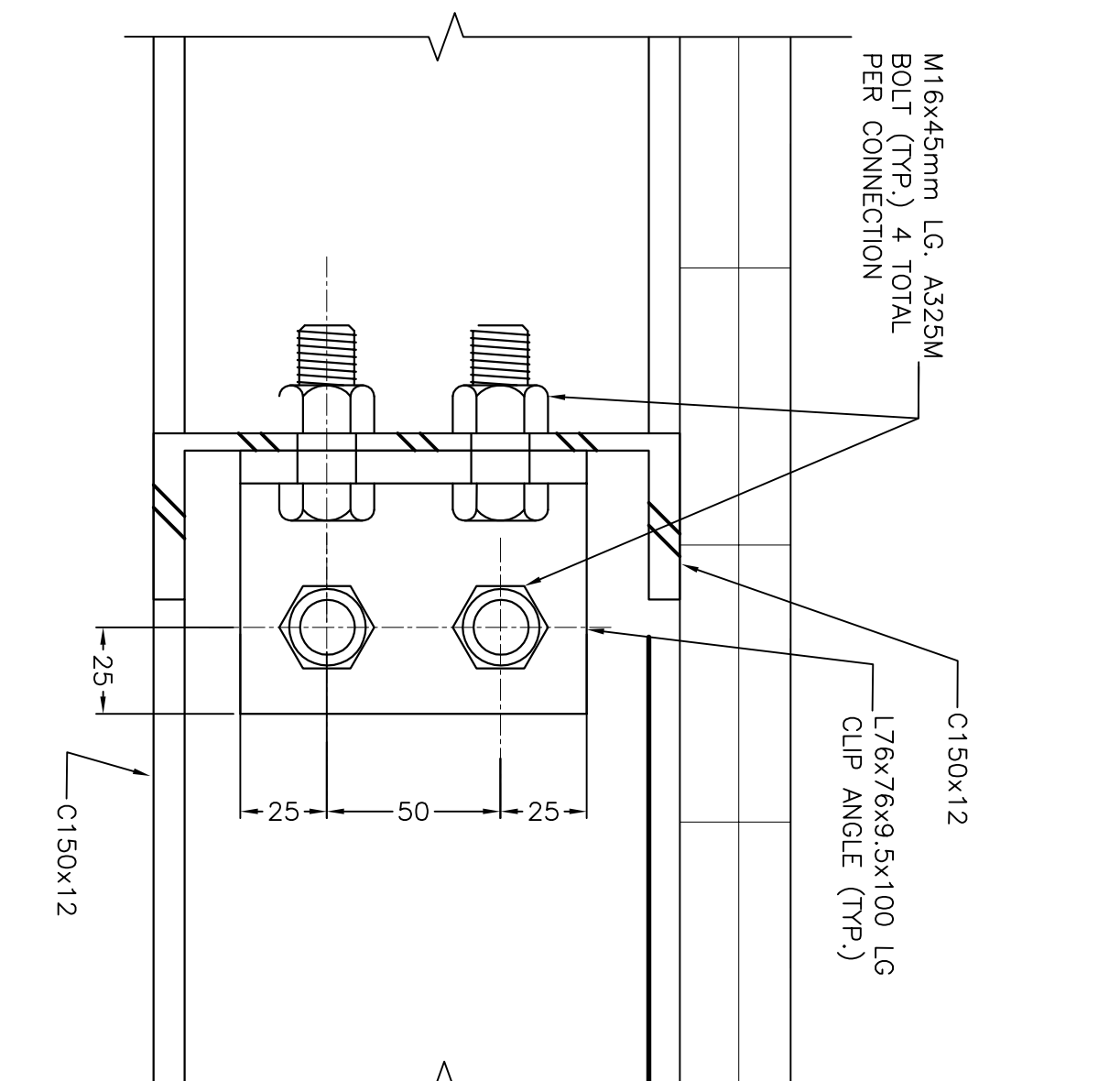
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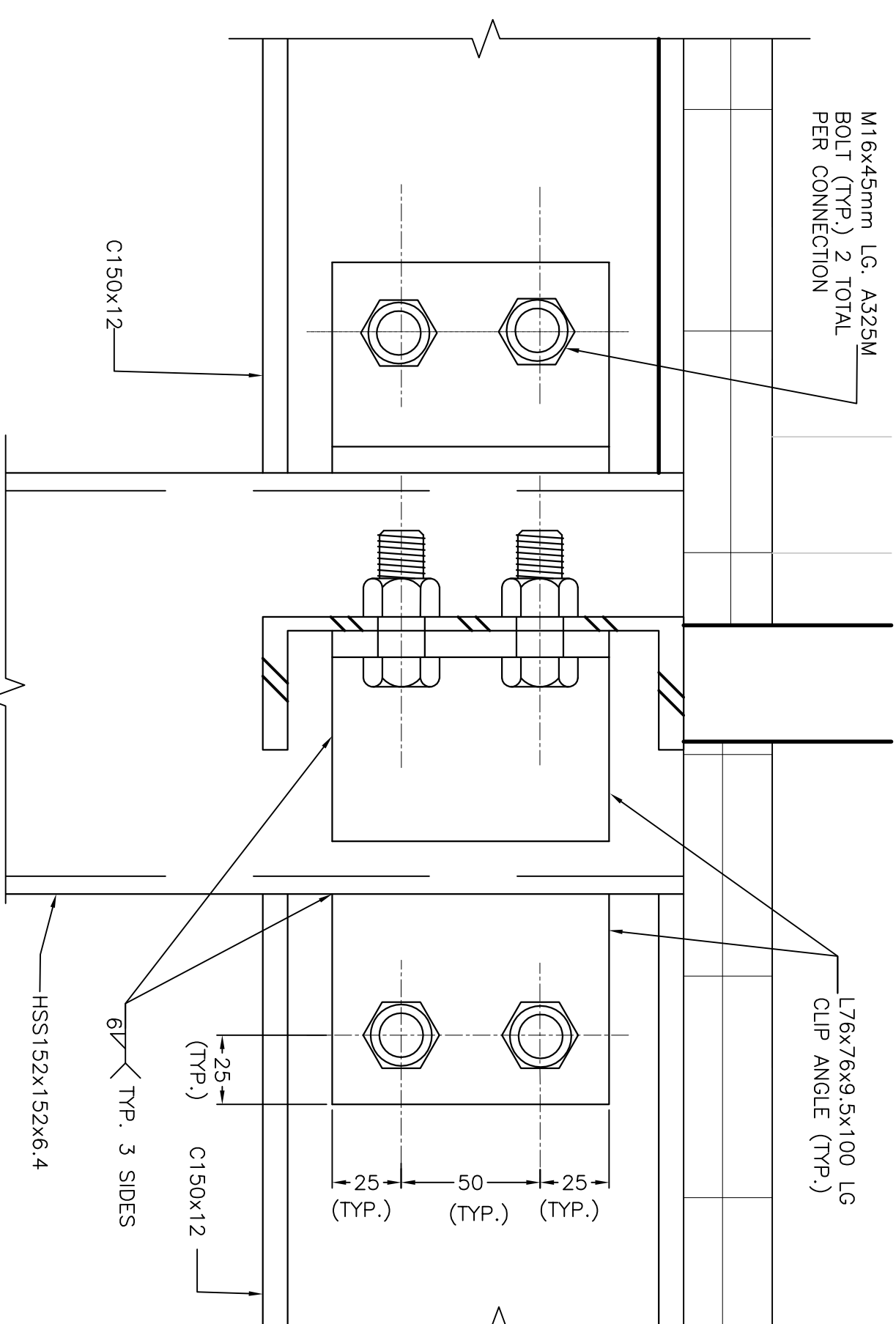
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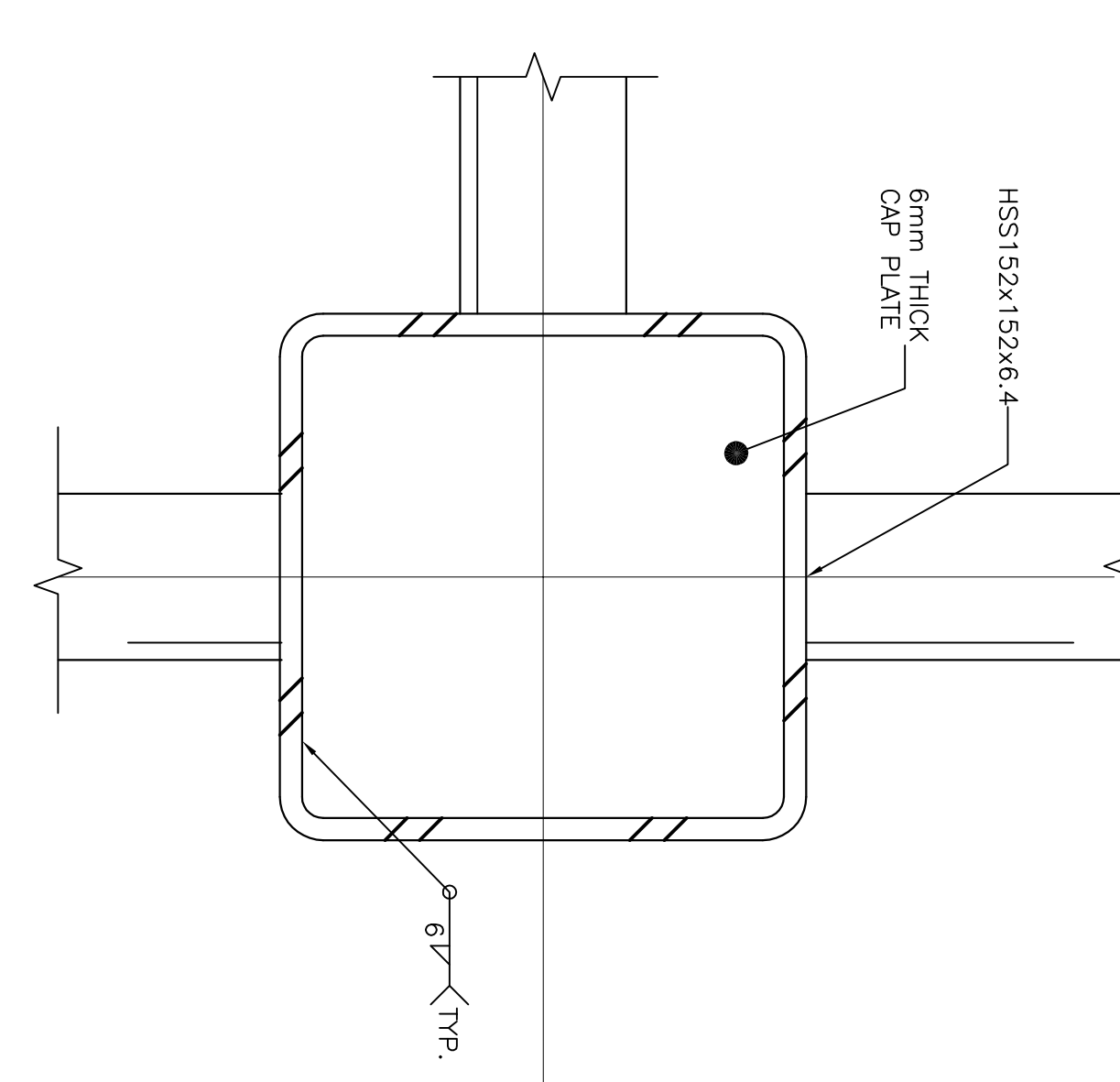
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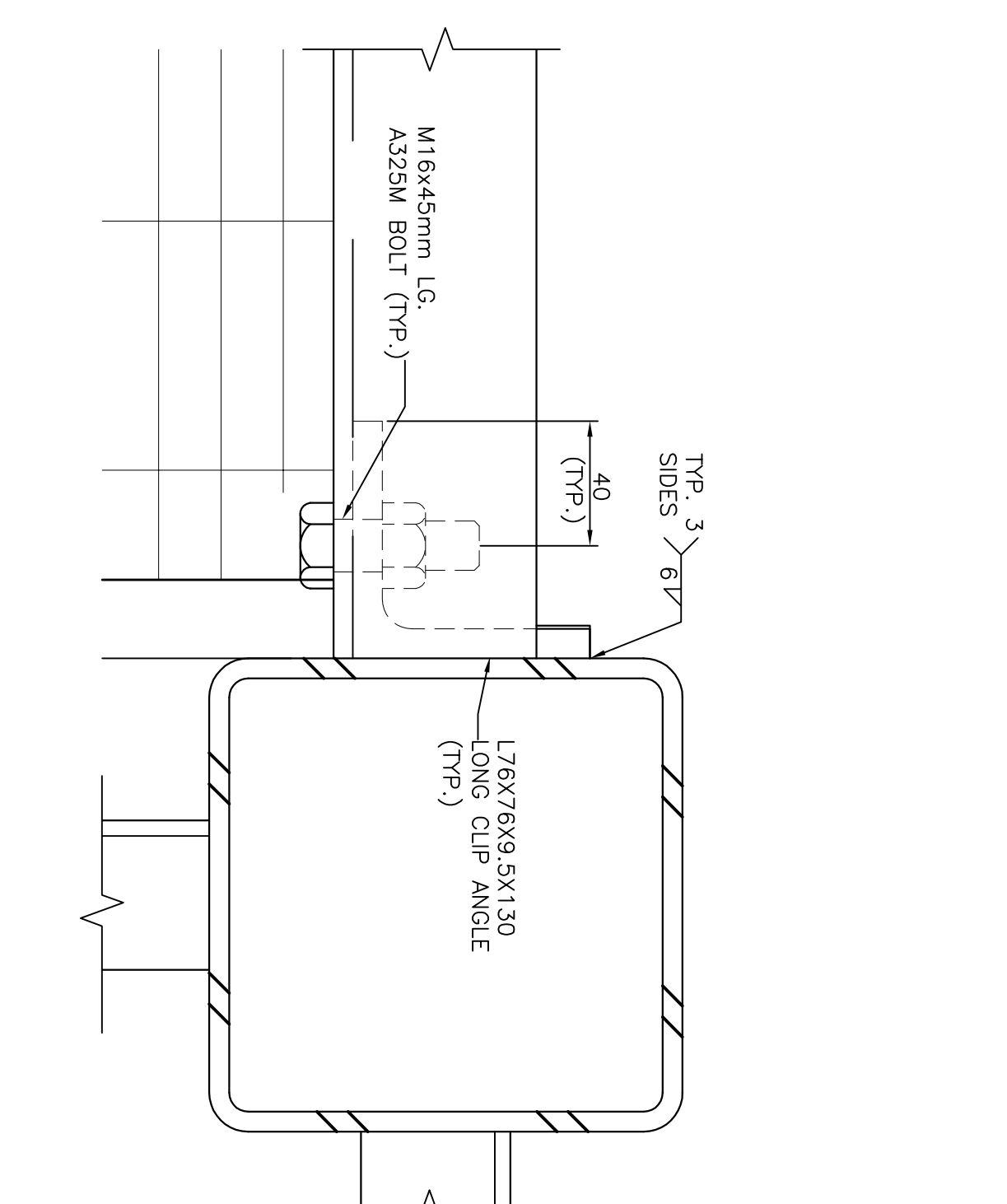
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SCALE: N.T.S



SECTION
SCALE: N.T.S

SCALE: N.T.S



4

906

PERMIT
PROVINCE OF NEWFOUNDLAND AND LABRADOR

pegal
PROVINCE OF NEWFOUNDLAND AND LABRADOR

MADDERA ENGINEERING

To provide Professional Engineering
in Newfoundland and Labrador.
Permit No. as issued by PEC: Y0253
which is valid for the year 2001
by Permit Holder (MNC No.) 000626



**EMERGENCY GENERATOR
SYSTEM FOR
SEARCH AND RESCUE
STATION
PORT AUX CHOIX, NL**

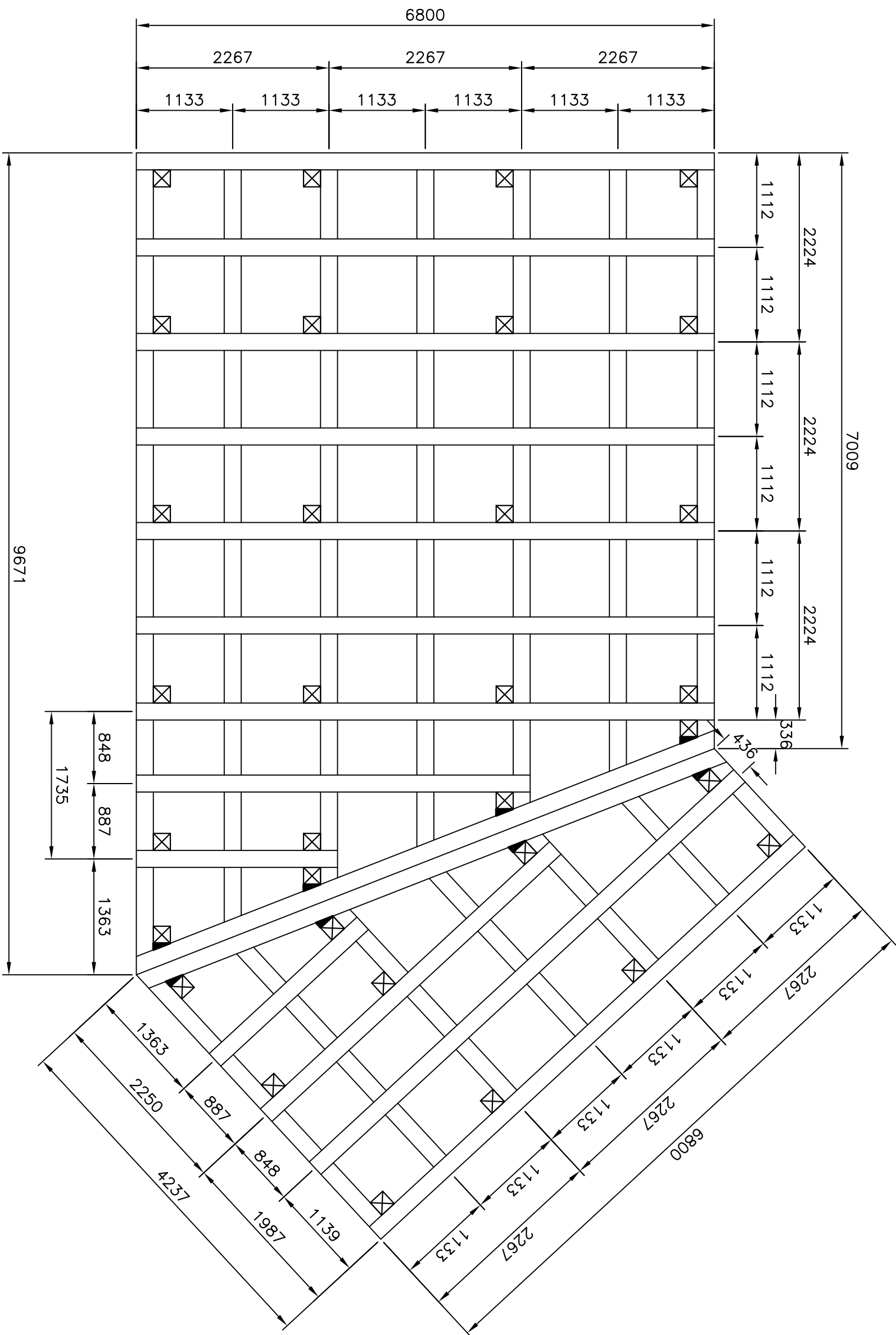
**GENERATOR SYSTEM
CONCRETE PAD &
ACCESS PLATFORM
DETAILS (GARAGE)**

designed	JW	concur
date	MAY 2020	
drawing	SB	dressing
date	MAY 2020	
approved	JW	approve
	MAY 2020	

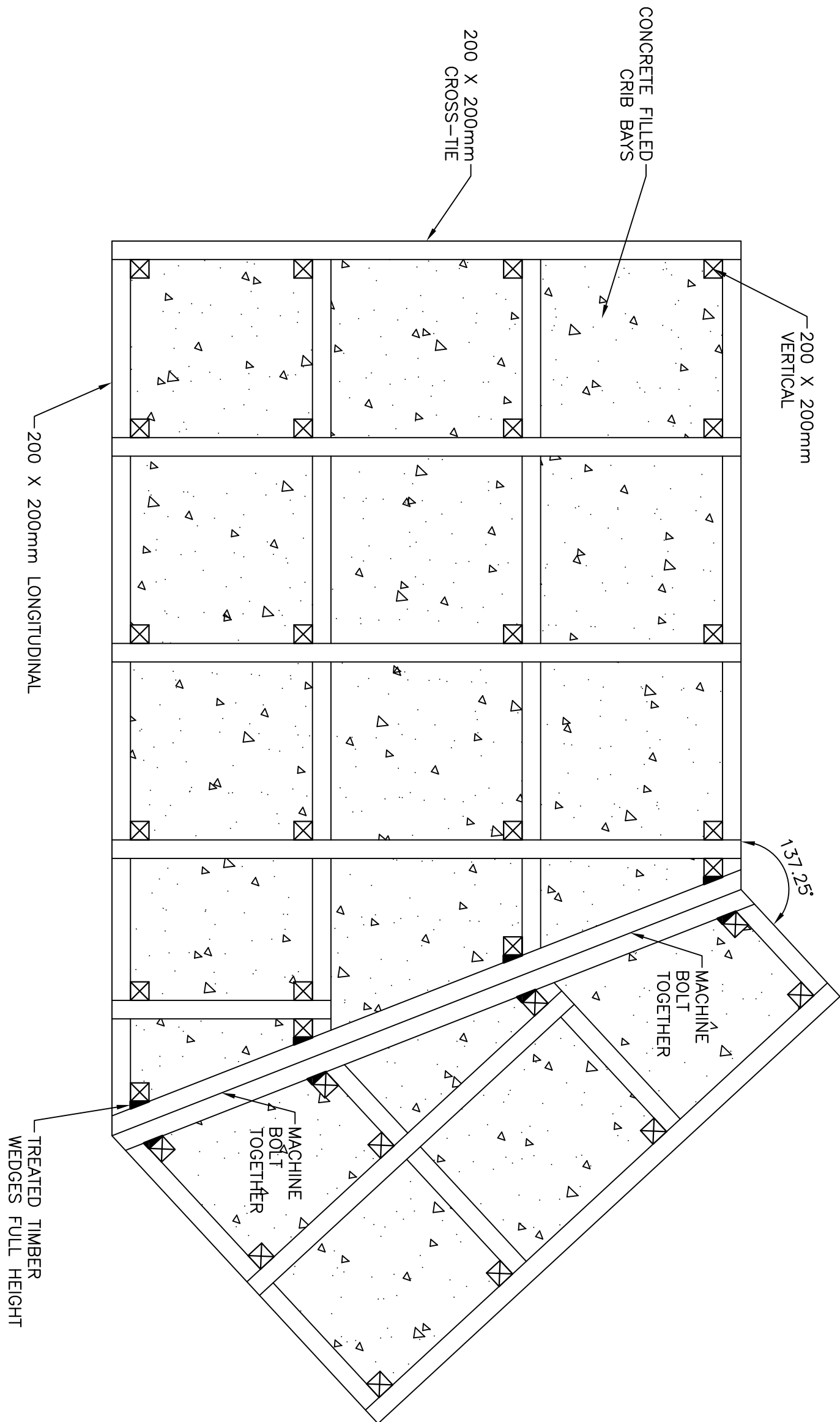
project number	no.
F6879-201000	

1211101H004S06

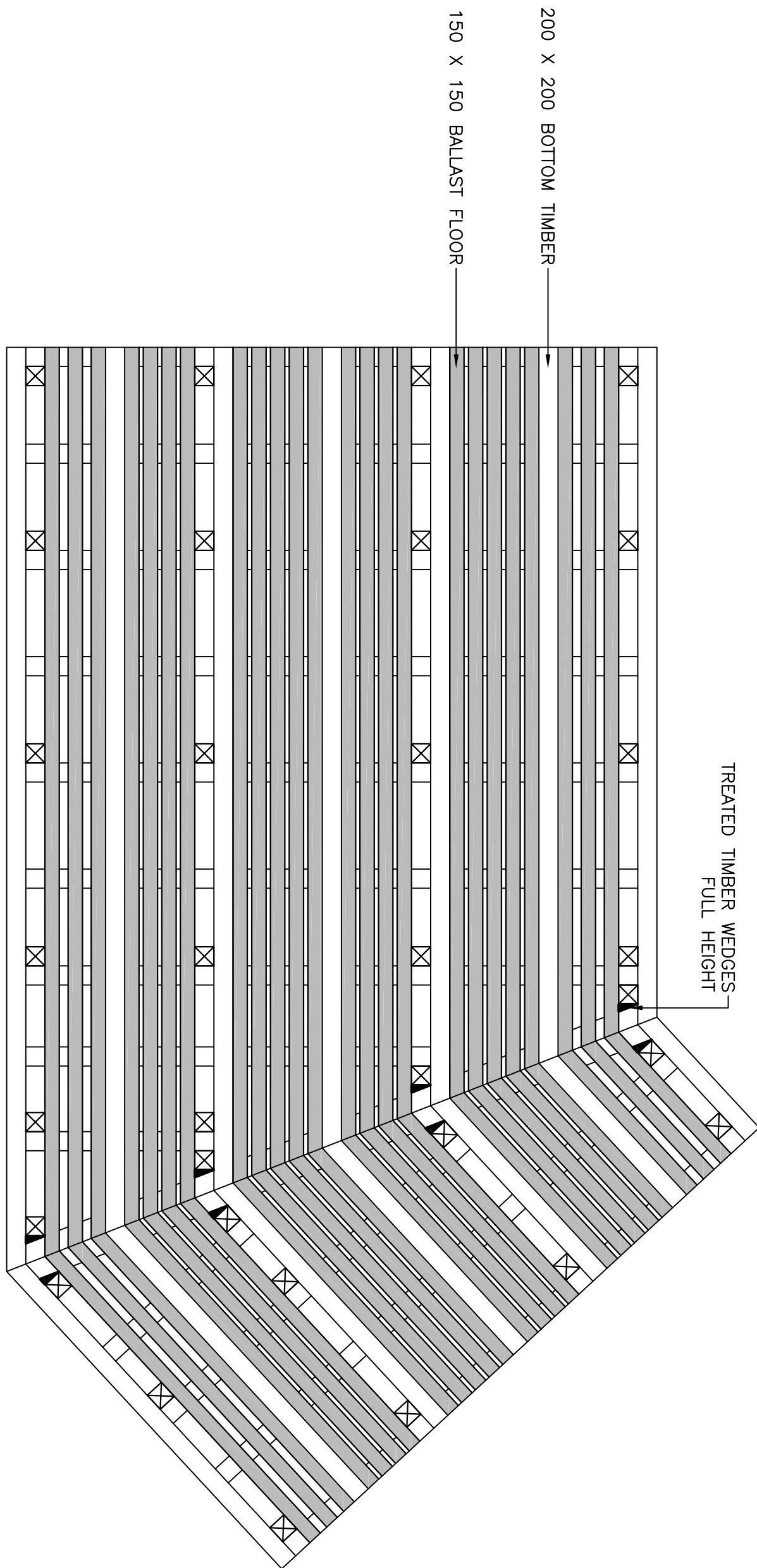
- NOTE:
- CRIB SIZE AND ORIENTATION MAY VARY TO SUIT SITE CONDITIONS. CONFIRM ON JOB (COO). SUBMIT SHOP DRAWING FOR REVIEW BEFORE INITIATING CONSTRUCTION.



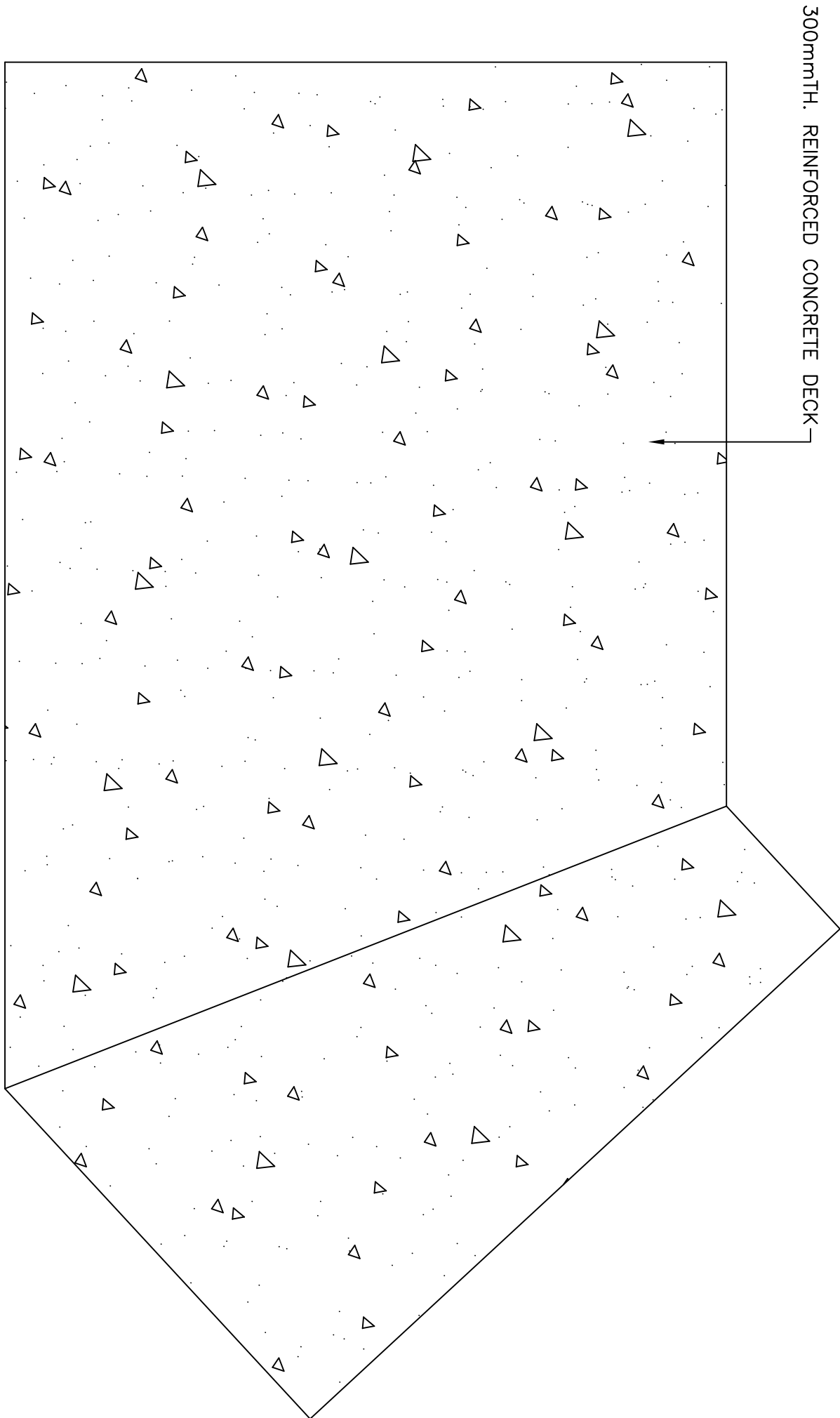
LAYOUT
SCALE : 1:50



CRIB TIMBERS
SCALE : 1:50



BALLAST FLOOR
SCALE : 1:50



REINFORCED CONCRETE DECK
SCALE : 1:50



- NOTES:
- ALL ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
 - ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.

