

LOAD CALCULATION (DEMAND) — CENTREVILLE WHARF

- RECEPTACLE LOAD (CEC 78-056)
10 — 120V, 30 AMP TWIST LOCK RECEPTACLES
3 — 120 VOLT, 20 AMP T-SLOT RECEPTACLES

• (4 x 30A x 120V) 100%	=	14.400 kW
• (4 x 30A x 120V) 65%	=	9.360 kW
• (2 x 30A x 120V) 50%	=	3.600 kW
• (3 x 20A x 120V) 50%	=	3.600 kW
SUBTOTAL		= 30.960 kW

- WHARF LIGHTING
5 — 168 WATT AREA LIGHTS = 5 x 168 = 0.840 kW
2 — 177 WATT FLOOD LIGHTS = 2 x 177 = 0.354 kW
1 — LIGHTING CONTACTOR = 1 x 500 = 0.500 kW

SUBTOTAL = 1.694 kW

- WINCH (NON-CONTINUOUS LOAD)

1 (5.0HP) x 30.8 x 208 = 6.4064 kW x 80%

TOTAL DERRICK LOAD = 5.1251 kW

- CONVENIENCE RECEPTACLE AT MAIN SERVICE BACK BOARD

• 1 x 20A x 120V = 1.920 kW

RECEPTACLES = 30.960 kW

LIGHTS = 1.694 kW

WINCH = 5.125 kW

CONVENIENCE RECEPTACLE = 1.920 kW

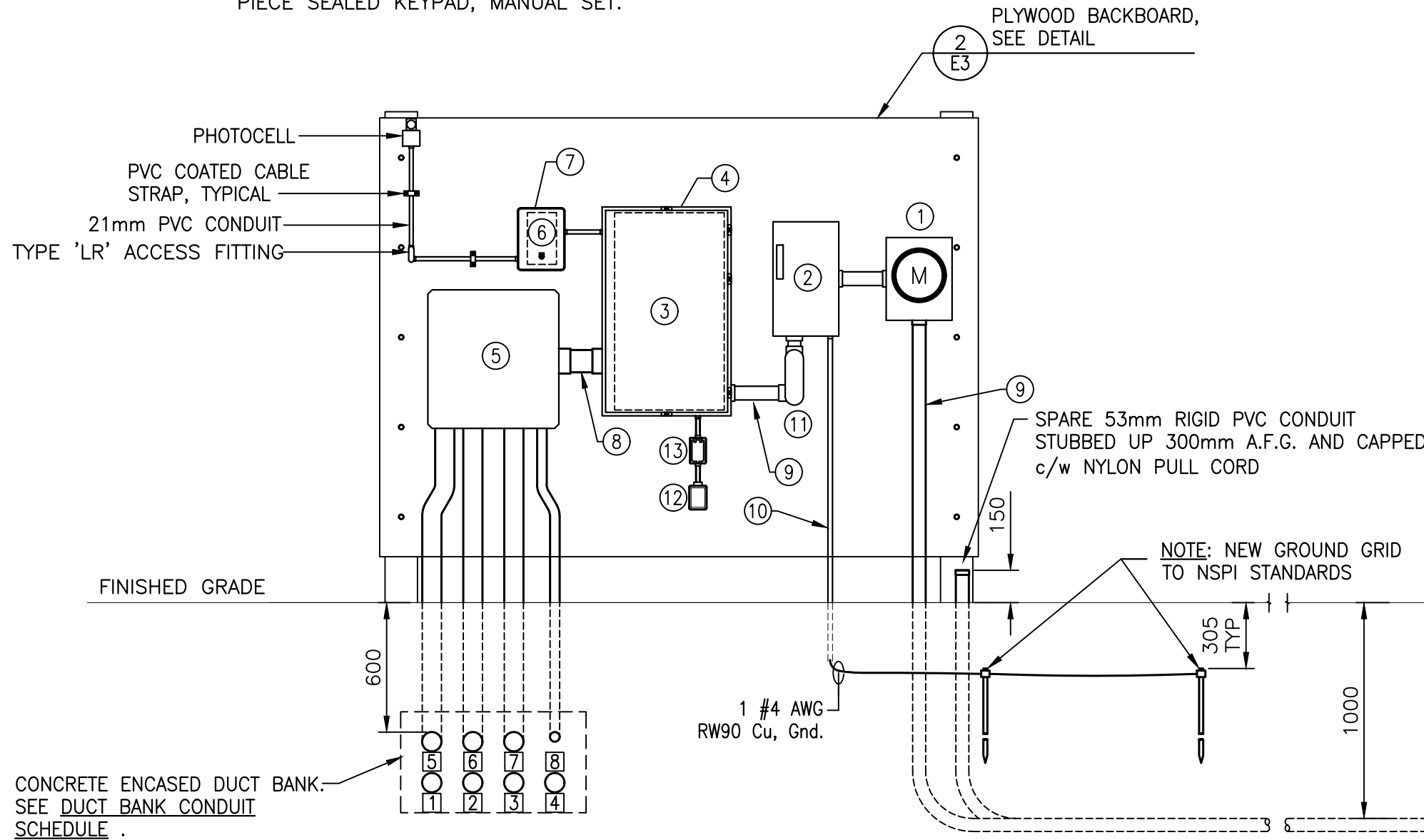
TOTAL = 39.699 kW

TOTAL = 39.699 kW @ 208 VOLTS, 3φ x 1.25 = 49.62375 kVA

SERVICE LOADING = 49.62375 kVA/208 VOLTS, 3φ = 137.7418 AMPS

BACKBOARD SERVICE EQUIPMENT:

- 200A, 4 JAW METERBASE, CSA TYPE 3R ENCLOSURE
- NEW LSI 200 AMP, 250 VOLT, 3φ, 4W, SN SERVICE ENTRANCE 100% RATED MAIN CIRCUIT BREAKER. BREAKER ADJUSTABLE TRIP SET AT 150 AMPS IN A CSA 4X RATED 316L STAINLESS STEEL ENCLOSURE c/w DIGITAL GROUND FAULT RELAY WITH ADJUSTABLE TRIP SETTINGS FOR BOTH TRIP TIME AND CURRENT TIME.
- 120/208V, 225A, 3φ, 4W, 24cct DISTRIBUTION PANEL (IDENTIFY AS PANEL 'A' WITH LAMICOID NAMEPLATE) c/w BRANCH CIRCUIT BREAKERS AS INDICATED ON PANEL SCHEDULE. NAMEPLATES REQUIRED FOR CIRCUIT IDENTIFICATION.
- CSA TYPE 4X 316L STAINLESS STEEL ENCLOSURE, c/w HINGED COVER, SCREW DOWN COVER, BUILT-IN PADLOCK HASP. SIZED TO SUIT PANEL.
- 600mm x 600mm x 150mm DEEP, MOLDED PVC JUNCTION BOX. CSA 4X RATED, SURFACE MOUNTED c/w MOUNTING FEET, AND GASKETTED SCREW DOWN COVER WITH STAINLESS STEEL SCREWS.
- TYPE 1 ENCLOSURE c/w TWO POLE LIGHTING CONTACTOR AND HOA SELECTOR SWITCH INSTALLED IN COVER
- CSA 4X 316L STAINLESS STEEL ENCLOSURE
- 103mm RIGID PVC CONDUIT
- 53mm RIGID PVC CONDUIT
- 21mm RIGID PVC CONDUIT
- TYPE 'LL' ACCESS FITTING
- 20 AMP, 125 VOLT, T-SLOT, CSA CONFIGURATION 5-20R, CORROSION RESISTANT, c/w HINGED & GASKETED 'IN-USE' COVER. MOUNTED IN STANDARD TYPE FD NON-METALLIC DEVICE BOX.
- GFCI MODULE, 20 AMP, 125 VOLT, HIGH IMPACT UV RESISTANT, TYPE 3R ENCLOSURE, LARGE NEON POWER 'ON' LIGHT, RECESSED ONE PIECE SEALED KEYPAD, MANUAL SET.



SERVICE POLE AND BACKBOARD

SCALE : N.T.S.

MAIN SERVICE BACKBOARD —STRUCTURAL

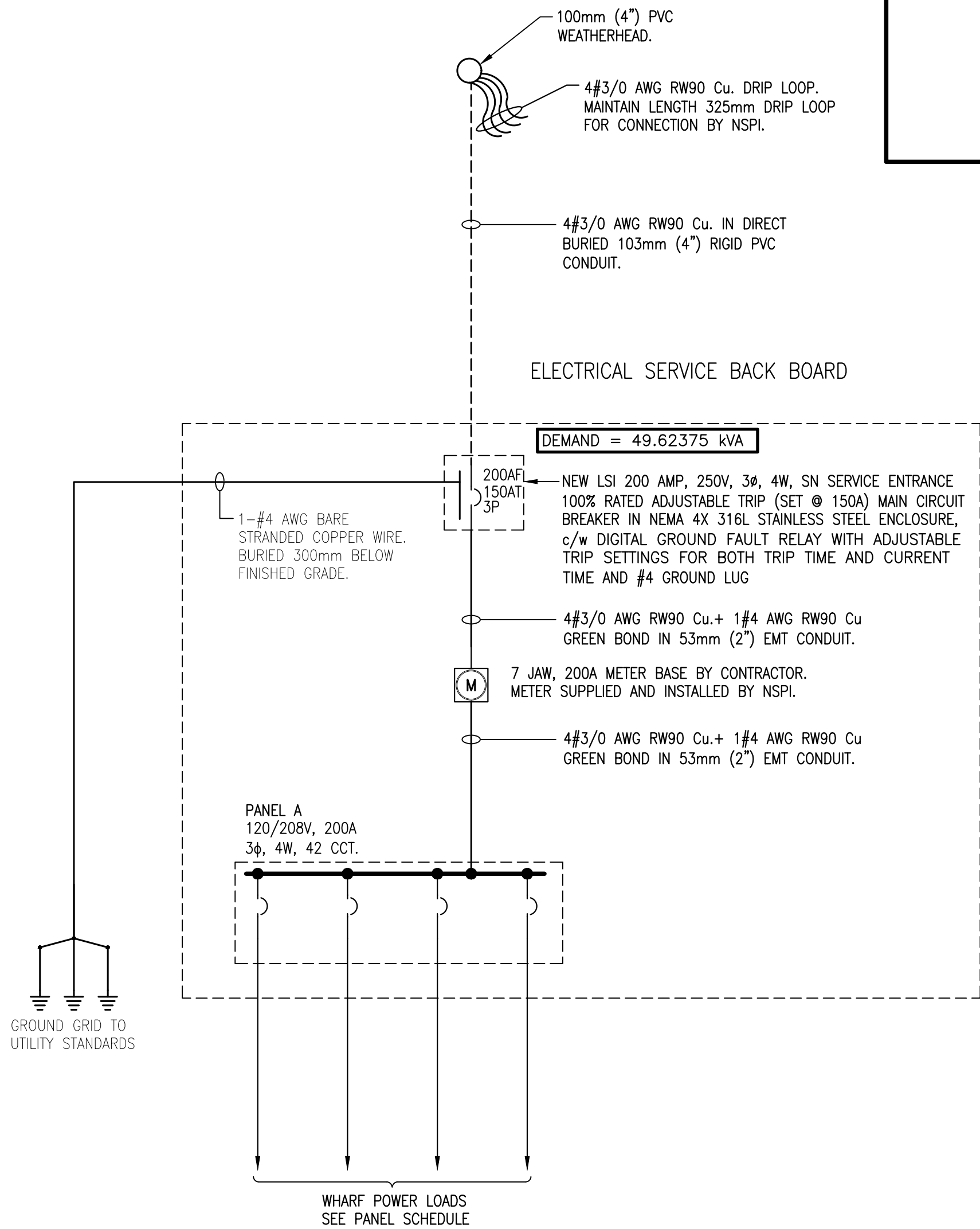
SCALE : N.T.S.

SECTION 'A'

SCALE : N.T.S.

ELECTRICAL SERVICE BACK BOARD

DEMAND = 49.62375 kVA



ELECTRICAL SINGLE LINE DIAGRAM

SCALE : N.T.S.

NOTES	VOLTS <u>120/208</u>			PANEL			<u>'A'</u>			TYPE <u>EEMAC 1</u> MAINS <u>225</u> AMPS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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PANEL 'A' SCHEDULE

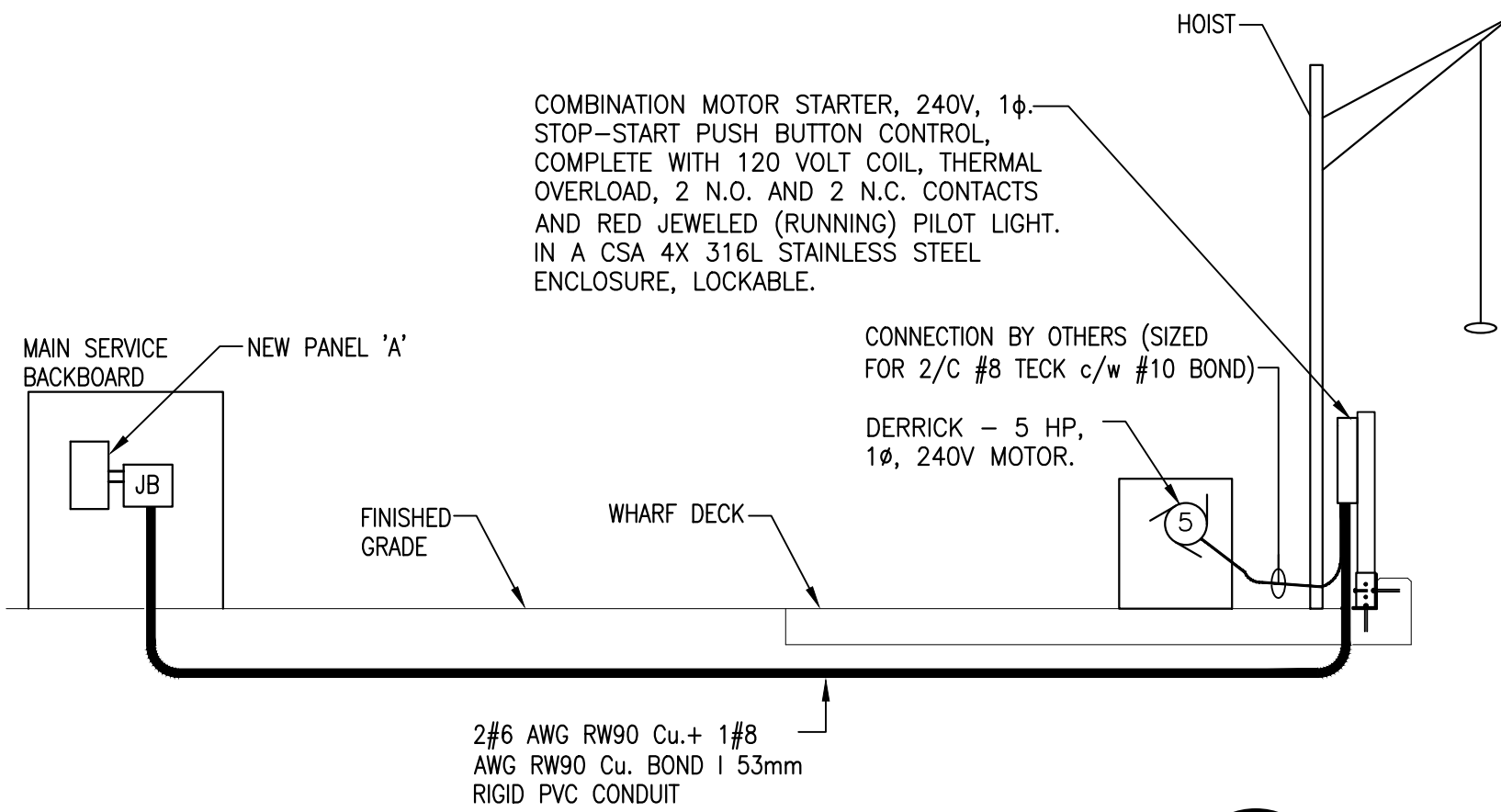
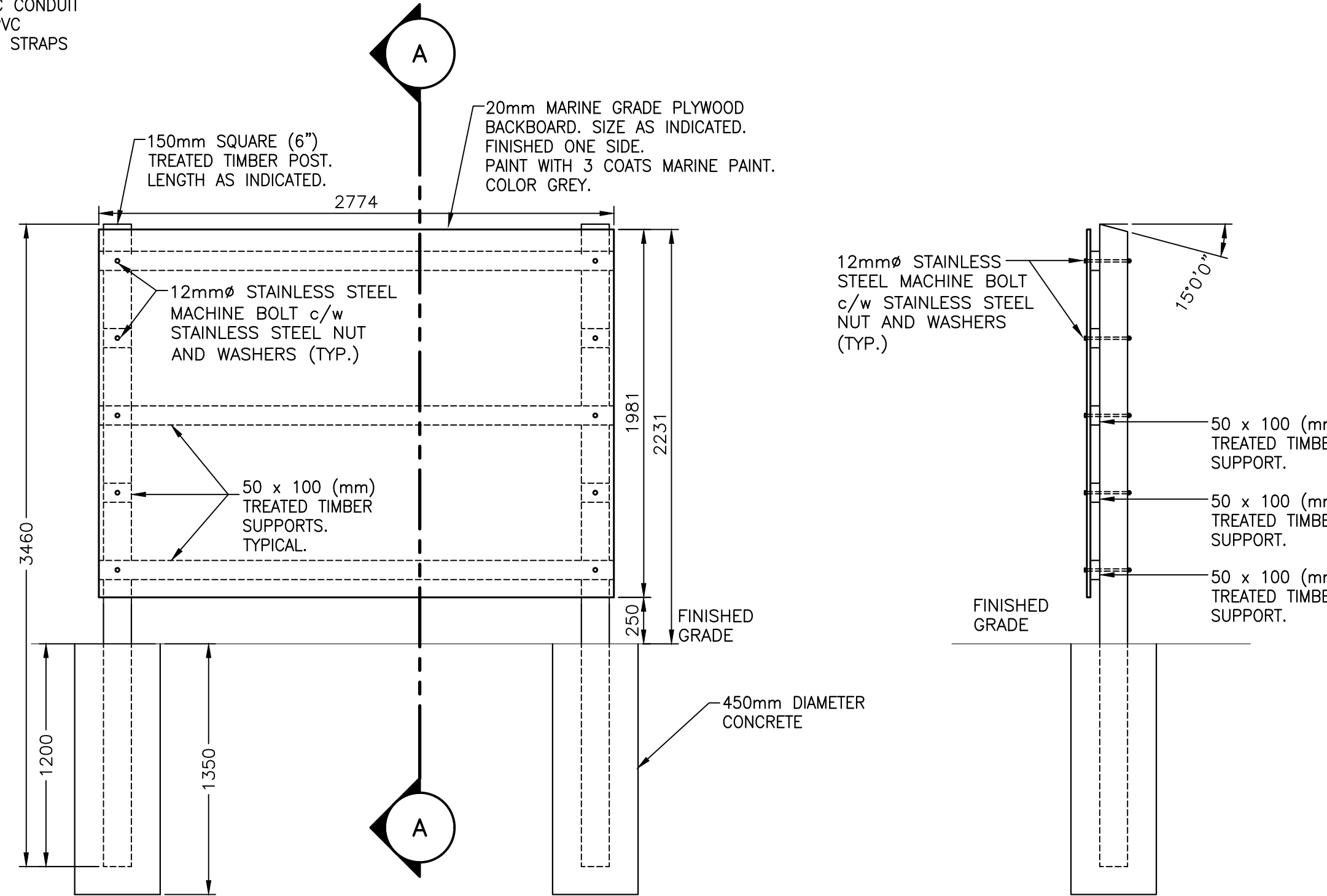
SCALE : N.T.S.

DUCT BANK CONDUIT SCHEDULE:

- 78mm CONDUIT — SPARE
- 78mm CONDUIT TO POWER SHROUD #2
- 78mm CONDUIT TO POWER SHROUD #4
- 78mm CONDUIT TO WINCH
- 78mm CONDUIT TO POWER SHROUD #1
- 78mm CONDUIT TO POWER SHROUD #3
- 78mm CONDUIT TO POWER SHROUD #5
- 27mm CONDUIT FOR AREA & FLOOD LIGHTING

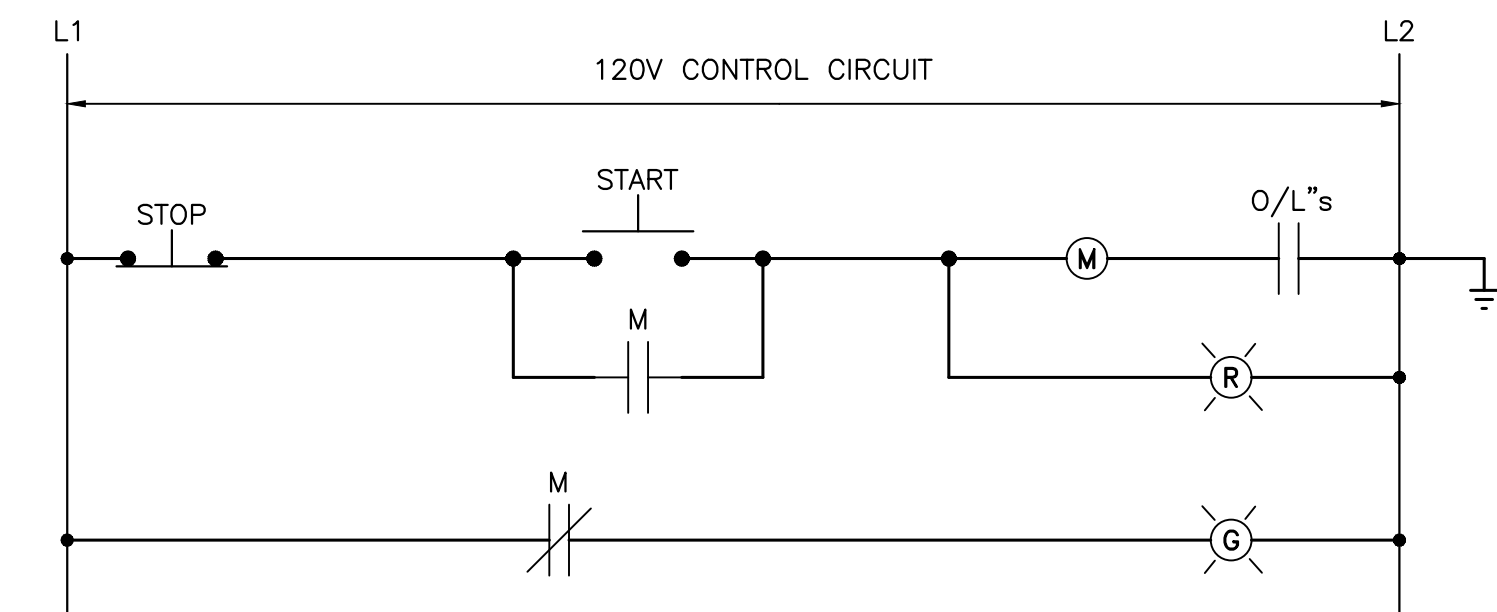
NOTE:

- SERVICE POLE INSTALLED TO NSPI STANDARDS.
- ALL DIMENSIONS ARE IN MILLIMETERS.
- ALL CONDUITS ARE TO BE COMPLETE WITH NYLON PULL STRING.
- ALL CONDUITS FOR FUTURE USE ARE TO BE CAPPED AND STUBBED UP AS PER DRAWINGS.



HOIST — POWER INSTALLATION DIAGRAM

SCALE : N.T.S.



TYPICAL DERRICK — CONTROL SCHEMATIC

SCALE : N.T.S.

NOTE:

ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN MILLIMETERS.



0	ISSUED FOR TENDER	MAY 2022
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revisions		date
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project	SCH WHARF 404, 405 406 RECONSTRUCTION	projet
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DIGBY COUNTY
NOVA SCOTIA

drawing		desin
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MAIN SERVICE DETAILS, SINGLE LINE, SCHEDULES

designed	K.G. WOLFE	conçu
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date	OCTOBER 2021	
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drawn	K.G. WOLFE	dessiné
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date	OCTOBER 2021	
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approved		approuvé
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Tender		Soumission
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PWGS Project Manager	Administrateur de projets TPSSC	
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project number		no. du projet
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