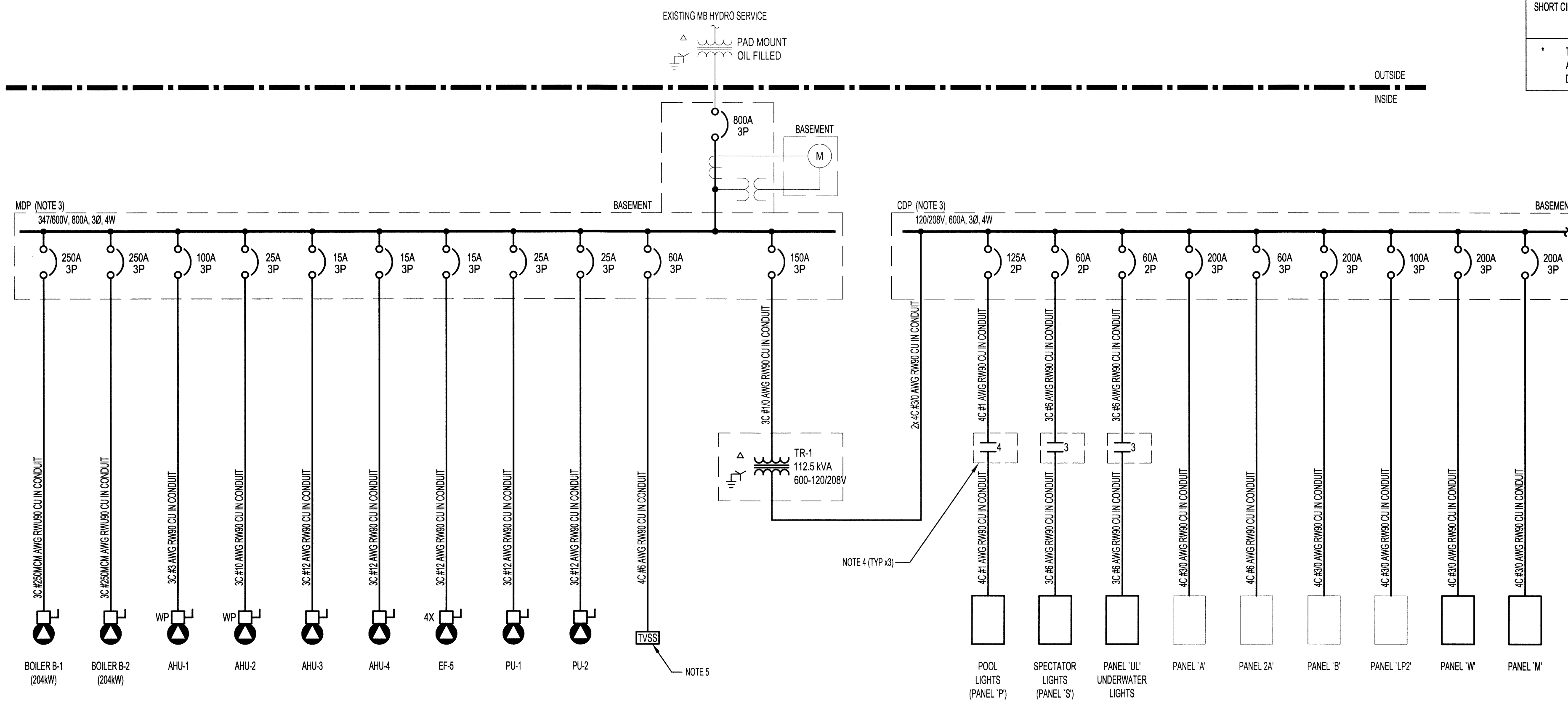


SINGLE LINE DIAGRAM - DEMOLITION
SCALE: N.T.S.



SINGLE LINE DIAGRAM - NEW
SCALE: N.T.S.

- ELECTRICAL NOTES:**
- GREY LINE WEIGHT DENOTES EXISTING.
 - DISCONNECT AND REMOVE THE INDICATED EQUIPMENT.
 - PROVIDE A MINIMUM OF 25% SPARE PHYSICAL SPACE FOR FUTURE USE IN THE MAIN DISTRIBUTION PANEL (MDP) AND THE CENTRAL DISTRIBUTION PANEL (CDP).
 - TIE THE NEW LIGHTING PANEL CONTACTORS INTO THE EXISTING LIGHTING CONTROLS LOCATED IN ROOM 114.
 - PROVIDE AN MOV TRANSIENT VOLTAGE SURGE SUPPRESSOR COMPLETE WITH NEMA 4 ENCLOSURE, ENHANCED TRANSIENT FILTER AND 30 YEAR WARRANTY. (TOTAL PROTECTION SOLUTIONS PART No. TR-S7203-3Y800-1)

NOTES:

THESE DRAWINGS SHALL NOT BE SCALED.

THE CONTRACTOR SHALL VISIT THE SITE AND SATISFY ONESELF ALL DIMENSIONS, DATUM, AND DETAILED INFORMATION SHOWN ARE CORRECT.

THE CONTRACTOR IS TO REVIEW AND COORDINATE ALL ARCHITECTURAL, MECHANICAL, ELECTRICAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL OPENINGS THROUGH FLOORS, WALLS, AND CEILINGS FOR DUCT, PIPE & ELECTRICAL RISERS AND ALL OPENINGS NOT SHOWN ON DRAWINGS.

ALL OPENINGS THROUGH FIRE ASSEMBLIES ARE TO BE FIRE STOPPED AND SEALED WITH ULC APPROVED FIRE STOPPING TO MAINTAIN THE INTEGRITY OF THE FIRE SEPARATION AND PROVIDE A SMOKE-TIGHT BARRIER.

ALL PRODUCTS AND MATERIALS TO BE USED AND INSTALLED SHALL CONFORM WITH MANUFACTURER'S SPECIFICATIONS & APPLICABLE CODES.

THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND MAKE GOOD ALL EXISTING CONSTRUCTION AFFECTED BY THE REMOVAL OF ALL ITEMS FORMING THE PART OF THE RENOVATION WORK.

WHERE NEW FLOORING AND BASE IS TO BE INSTALLED IN EXISTING AREAS (REFER TO FLOOR PLAN AND ROOM SCHEDULE) THE EXISTING FLOORING SURFACE AND BASE MUST BE REMOVED, UNLESS OTHERWISE NOTED. ALL FLOOR SURFACES SHALL BE PREPARED IN ACCORDANCE TO MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION OF NEW FLOOR.

WHERE PAINTING OF EXISTING WALLS IS INDICATED ON THE ROOM SCHEDULE, THESE WALLS MUST BE CLEANED OF ANY EXISTING WALL COVERING, PATCHED & PREPARED TO ACCEPT NEW MATERIAL, UNLESS OTHERWISE NOTED.

DESIGN BASIS LOAD CALCULATION

600V MOTOR LOADS	= 125kW
600V HEATING LOADS	= 415kW
120/208V BUILDING LOADS	= 65kW
TOTAL	= 605kW

FAULT CURRENT CALCULATION

* 1000kVA TRANSFORMER:	Z = 4%	
600V SYSTEM SHORT CIRCUIT AMPACITY	$\frac{1000kVA}{\sqrt{3} (4\%) 600V}$	= 24.061kA PROVIDE 28kA MINIMUM
* THIS IMPEDANCE VALUE IS BASED ON THE VALUE PROVIDED UNDER THE MANITOBA HYDRO ELECTRICAL CODE, 10TH EDITION. * CONTRACTOR AND MANUFACTURER TO ENSURE ALL FUSES AND BREAKERS ARE AN APPROVED CSA SERIES TESTED COMBINATION.		
* 112.5kVA TRANSFORMER:	Z = 5.86%	
208V SYSTEM SHORT CIRCUIT AMPACITY	$\frac{112.5kVA}{\sqrt{3} (5.86\%) 208V}$	= 5.3kA PROVIDE 10kA MINIMUM
* THIS IMPEDANCE VALUE IS BASED ON A DELTA TRANSFORMER. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED IF THE MINIMUM SHORT CIRCUIT AMPACITY INCREASES DUE TO PROVIDING A DIFFERENT MANUFACTURER'S TRANSFORMER.		

- LEGEND:**
- MOTOR LOAD
 - DISCONNECT SWITCH
 - DENOTES:
WP WEATHERPROOF
4X NEMA 4X ENCLOSURE
 - CONTACTOR
 - NEMA STARTER SIZE
 - POTENTIAL TRANSFORMER
 - CONTROL TRANSFORMER
 - CIRCUIT BREAKER
 - FUSED DISCONNECT
 - DELTA-WYE TRANSFORMER WITH ISOLATION

0	ISSUED FOR CONSTRUCTION		15.02.17
No.	REVISION/DESCRIPTION	BY	DATE

SEAL

DRAWN: GSN
CHECKED: [Signature]
DESIGNED: CLS
APPROVED: [Signature]

DATE: 2014.10.29
USER APPROVAL

THE CITY OF WINNIPEG
PLANNING, PROPERTY AND
DEVELOPMENT DEPARTMENT
MUNICIPAL ACCOMMODATIONS DIVISION
3-65 GARRY STREET, R3C 4K4

PROJECT
**SHERBROOK POOL
REFURBISHMENT OF SHERBROOK POOL**

381 SHERBROOK STREET
SHEET TITLE

ELECTRICAL
SINGLE LINE DIAGRAMS

SCALE	PROJECT No:	SHEET No:
AS SHOWN	2013-173	E00

