



- NOTES:
- CABLES SHOWN IN DOTTED LINES ARE PLANNED FOR REUSE. CONTRACTOR TO MEASURE AND REUSE FOR PROJECT.
  - ALL FIXED AND DRAW-OUT BREAKERS ARE 3-POLE
  - DEPARTMENTAL REPRESENTATIVE TO ADVISE ON RATING FOR SPARE BREAKERS
  - SEQUENCE OF OPERATION FOR KIRK KEY FOR ATS BYPASS BREAKER  
PURPOSE:  
TO PREVENT CONNECTION OF ATS#1 & 2 NORMAL AND EMERGENCY POWER WHEN CLOSING THE ATS#1 & 2 BYPASS BREAKER FOR ATS#1 & 2 SHUTDOWN/MAINTENANCE.  
NORMAL OPERATION CONDITION:  
SWBD-1A: THE ATS#1-N AND ATS#1-E BREAKERS ARE CLOSED WITH KIRK LOCK K1 & K2 ARE HELD WITH KEYS. THE  
ATS#1-BYPASS BREAKER IS OPEN IN THE TEST OR DISCONNECTED POSITION WITHOUT ANY KEYS IN KIRK LOCK K3.  
SWBD-2B: THE ATS#2-N AND ATS#2-E ARE CLOSED. KIRK KEY K4 & K5 ARE HELD IN THEIR RESPECTIVE BREAKER. THE  
ATS BYPASS BREAKER IS OPEN IN THE TEST OR DISCONNECTED POSITION.  
SEQUENCE OF OPERATION TO TRANSFER/RESTORE TO ATS#1 BYPASS  
1. PUT ATS#1 TRANSFER CONTROLLER IN OFF TO ENSURE ATS IS DEAD AND STAY IN NORMAL POSITION.  
2. OPEN BREAKER ATS#1-N AND WITHDRAW BREAKER INTO TEST POSITION. TURN KEY K1 FROM ATS#1-N TO LOCK THE  
SHUTTERS AND KEY K1 IS NOW FREE.  
3. OPEN BREAKER ATS#1-E AND WITHDRAW BREAKER INTO TEST POSITION. TURN KEY K2 FROM ATS#1-E TO LOCK THE  
SHUTTERS AND KEY K2 IS NOW FREE AND AVAILABLE FOR USE.  
4. INSERT KIRK KEY K1 AND K2 INTO ATS#1-BYPASS BREAKER. TURN KIRK KEY K1 & K2 TO OPEN THE SHUTTERS AND  
INSERT ATS#1-BYPASS BREAKER INTO CONNECTED POSITION. BOTH K1 & K2 KEY WILL BE HELD IN, CLOSE  
ATS#1-BYPASS BREAKER.  
5. REVERSE SEQUENCE TO RESTORE NORMAL OPERATING CONDITION.  
SEQUENCE OF OPERATION OF ATS#2-BYPASS TRANSFER /RESTORE IS SAME AS ATS#1. ONLY CHANGE IS IN KIRK KEY  
NUMBERS ARE K4 FOR ATS#2-N, K5 FOR ATS#2-E AND K6 FOR ATS#2-BYPASS



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|------------|-------------------------------------------|
| 2016/04/27 | Issued for Tender                         |
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| 2016/01/08 | Issued for 99% submission                 |
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| Date       | Revision                                  |

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project

CFIA  
Olf Electrical Upgrades

drawing

dessin

SINGLE LINE DIAGRAM  
NEW – PHASE 2

Drawn By: S.S.  
Date 2015-06-24  
Reviewed By: P.I.  
Date 2016-01-25  
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