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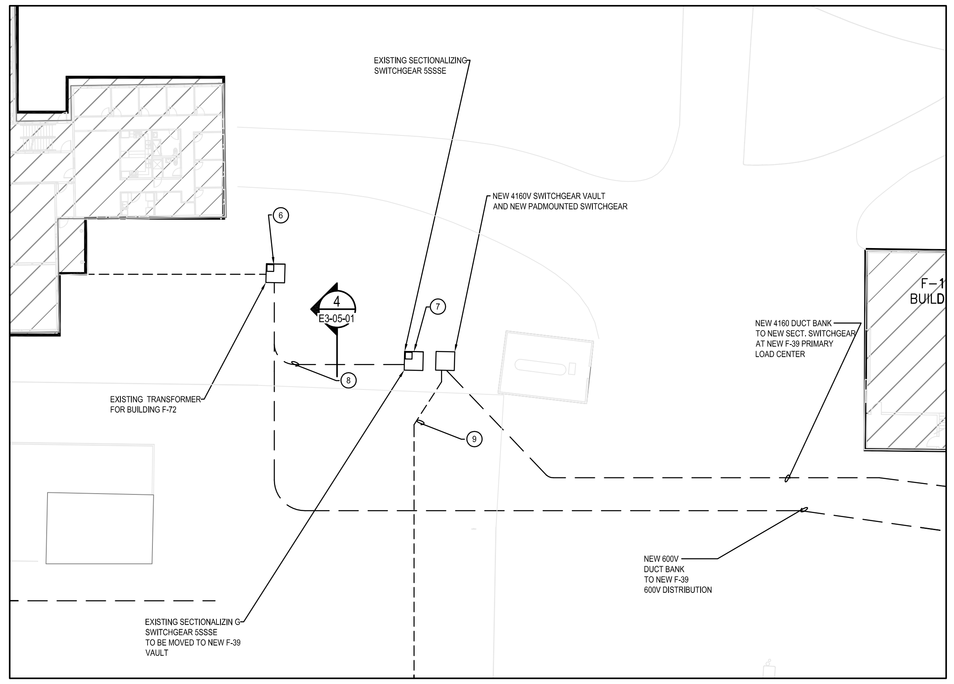
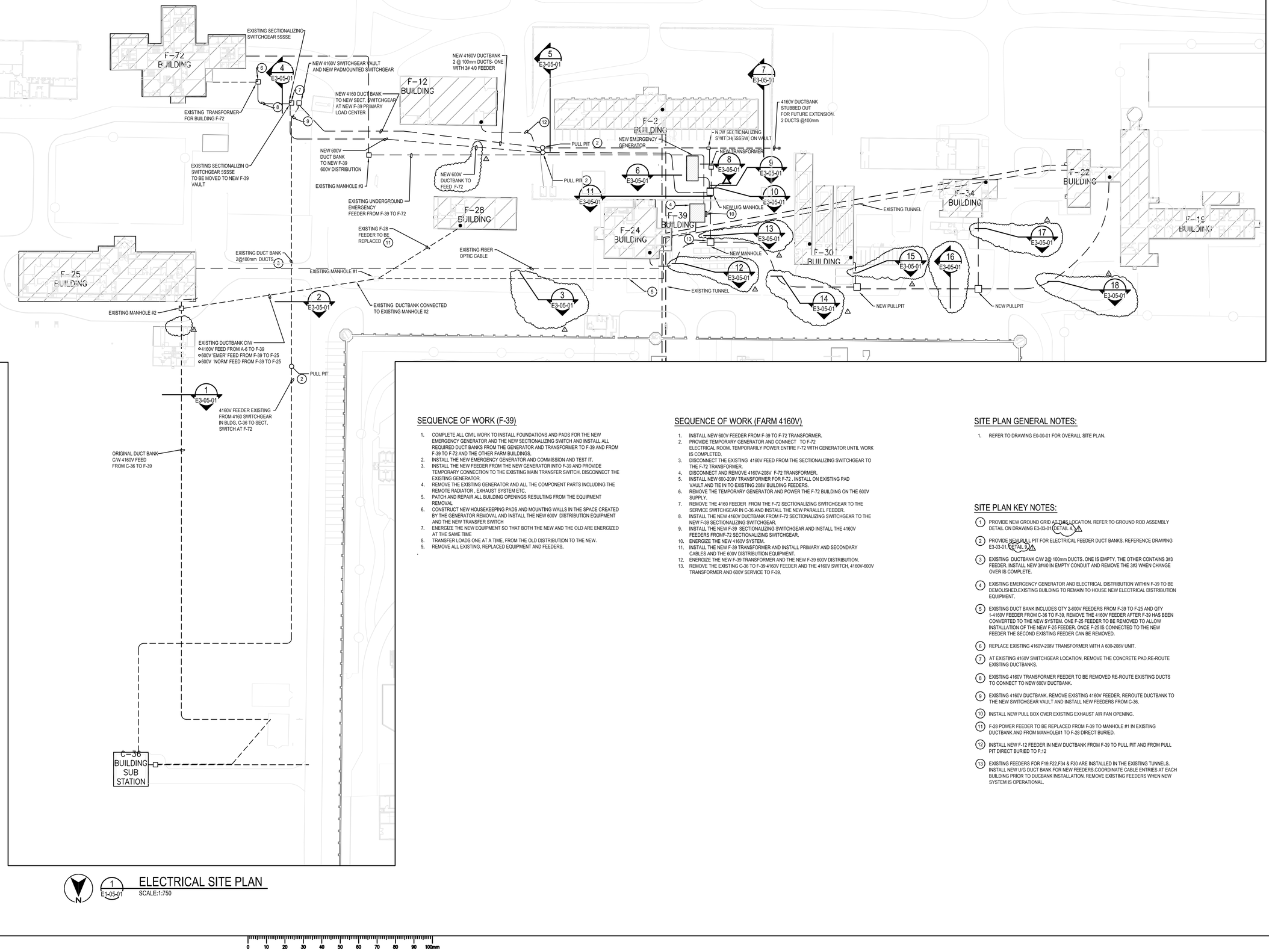


N 2 E1-05-01 BUILDING F-72 AREA SITE PLAN
SCALE:1:300

N 3 E1-05-01 BUILDING F-39 AREA SITE PLAN
SCALE:1:300



N 1 E1-05-01 ELECTRICAL SITE PLAN
SCALE:1:750

SEQUENCE OF WORK (F-39)

1. COMPLETE ALL CIVIL WORK TO INSTALL FOUNDATIONS AND PADS FOR THE NEW EMERGENCY GENERATOR AND THE NEW SECTIONALIZING SWITCH AND INSTALL ALL REQUIRED DUCT BANKS FROM THE GENERATOR AND TRANSFORMER TO F-39 AND FROM F-39 TO F-72 AND THE OTHER FARM BUILDINGS.
2. INSTALL THE NEW EMERGENCY GENERATOR AND COMMISSION AND TEST IT.
3. INSTALL THE NEW FEEDER FROM THE NEW GENERATOR INTO F-39 AND PROVIDE TEMPORARY CONNECTION TO THE EXISTING MAIN TRANSFER SWITCH. DISCONNECT THE EXISTING GENERATOR.
4. REMOVE THE EXISTING GENERATOR AND ALL THE COMPONENT PARTS INCLUDING THE REMOTE RADIATOR , EXHAUST SYSTEM ETC.
5. PATCH AND REPAIR ALL BUILDING OPENINGS RESULTING FROM THE EQUIPMENT REMOVAL
6. CONSTRUCT NEW HOUSEKEEPING PADS AND MOUNTING WALLS IN THE SPACE CREATED BY THE GENERATOR REMOVAL AND INSTALL THE NEW 600V DISTRIBUTION EQUIPMENT AND THE NEW TRANSFER SWITCH
7. ENERGIZE THE NEW EQUIPMENT SO THAT BOTH THE NEW AND THE OLD ARE ENERGIZED AT THE SAME TIME
8. TRANSFER LOADS ONE AT A TIME, FROM THE OLD DISTRIBUTION TO THE NEW.
9. REMOVE ALL EXISTING, REPLACED EQUIPMENT AND FEEDERS.

SEQUENCE OF WORK (FARM 4160V)

1. INSTALL NEW 600V FEEDER FROM F-39 TO F-72 TRANSFORMER.
2. PROVIDE TEMPORARY GENERATOR AND CONNECT TO F-72 ELECTRICAL ROOM. TEMPORARILY POWER ENTIRE F-72 WITH GENERATOR UNTIL WORK IS COMPLETED.
3. DISCONNECT THE EXISTING 4160V FEED FROM THE SECTIONALIZING SWITCHGEAR TO THE F-72 TRANSFORMER.
4. DISCONNECT AND REMOVE 4160V-208Y F-72 TRANSFORMER.
5. INSTALL NEW 600-208V TRANSFORMER FOR F-72. INSTALL ON EXISTING PAD VAULT AND TIE IN TO EXISTING 208V BUILDING FEEDERS.
6. REMOVE THE TEMPORARY GENERATOR AND POWER THE F-72 BUILDING ON THE 600V SUPPLY.
7. REMOVE THE 4160 FEEDER FROM THE F-72 SECTIONALIZING SWITCHGEAR TO THE SERVICE SWITCHGEAR IN C-36 AND INSTALL THE NEW PARALLEL FEEDER.
8. INSTALL THE NEW 4160V DUCTBANK FROM F-72 SECTIONALIZING SWITCHGEAR TO THE NEW F-39 SECTIONALIZING SWITCHGEAR.
9. INSTALL THE NEW F-39 SECTIONALIZING SWITCHGEAR AND INSTALL THE 4160V FEEDERS FROM F-72 SECTIONALIZING SWITCHGEAR.
10. ENERGIZE THE NEW 4160V SYSTEM.
11. INSTALL THE NEW F-39 TRANSFORMER AND INSTALL PRIMARY AND SECONDARY CABLES AND THE 600V DISTRIBUTION EQUIPMENT.
12. ENERGIZE THE NEW F-39 TRANSFORMER AND THE NEW F-39 600V DISTRIBUTION.
13. REMOVE THE EXISTING C-36 TO F-39 4160V FEEDER AND THE 4160V SWITCH. 4160V-600V TRANSFORMER AND 600V SERVICE TO F-39.

SITE PLAN GENERAL NOTES:

1. REFER TO DRAWING E0-00-01 FOR OVERALL SITE PLAN.

SITE PLAN KEY NOTES:

1. PROVIDE NEW GROUND GRID AT THIS LOCATION. REFER TO GROUND ROD ASSEMBLY DETAIL ON DRAWING E3-05-01 DETAIL 4
2. PROVIDE NEW PULL PIT FOR ELECTRICAL FEEDER DUCT BANKS. REFERENCE DRAWING E3-05-01 DETAIL 5A
3. EXISTING DUCTBANK C/W 2@ 100mm DUCTS. ONE IS EMPTY, THE OTHER CONTAINS 3#3 FEEDER. INSTALL NEW 3#4/0 IN EMPTY CONDUIT AND REMOVE THE 3#3 WHEN CHANGE OVER IS COMPLETE.
4. EXISTING EMERGENCY GENERATOR AND ELECTRICAL DISTRIBUTION WITHIN F-39 TO BE DEMOLISHED.EXISTING BUILDING TO REMAIN TO HOUSE NEW ELECTRICAL DISTRIBUTION EQUIPMENT.
5. EXISTING DUCT BANK INCLUDES QTY 2-600V FEEDERS FROM F-39 TO F-25 AND QTY 1-4160V FEEDER FROM C-36 TO F-39. REMOVE THE 4160V FEEDER AFTER F-39 HAS BEEN CONVERTED TO THE NEW SYSTEM. ONE F-25 FEEDER TO BE REMOVED TO ALLOW INSTALLATION OF THE NEW F-25 FEEDER. ONCE F-25 IS CONNECTED TO THE NEW FEEDER THE SECOND EXISTING FEEDER CAN BE REMOVED.
6. REPLACE EXISTING 4160V-208Y TRANSFORMER WITH A 600-208V UNIT.
7. AT EXISTING 4160V SWITCHGEAR LOCATION, REMOVE THE CONCRETE PAD,RE-ROUTE EXISTING DUCTBANKS.
8. EXISTING 4160V TRANSFORMER FEEDER TO BE REMOVED RE-ROUTE EXISTING DUCTS TO CONNECT TO NEW 600V DUCTBANK.
9. EXISTING 4160V DUCTBANK, REMOVE EXISTING 4160V FEEDER. REROUTE DUCTBANK TO THE NEW SWITCHGEAR VAULT AND INSTALL NEW FEEDERS FROM C-36.
10. INSTALL NEW PULL BOX OVER EXISTING EXHAUST AIR FAN OPENING.
11. F-28 POWER FEEDER TO BE REPLACED FROM F-39 TO MANHOLE #1 IN EXISTING DUCTBANK AND FROM MANHOLE#1 TO F-28 DIRECT BURIED.
12. INSTALL NEW F-12 FEEDER IN NEW DUCTBANK FROM F-39 TO PULL PIT AND FROM PULL PIT DIRECT BURIED TO F-12
13. EXISTING FEEDERS FOR F18 F22,F34 & F30 ARE INSTALLED IN THE EXISTING TUNNELS . INSTALL NEW U/G DUCT BANK FOR NEW FEEDERS,COORDINATE CABLE ENTRIES AT EACH BUILDING PRIOR TO DUCBANK INSTALLATION. REMOVE EXISTING FEEDERS WHEN NEW SYSTEM IS OPERATIONAL.

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19/04/25

Association of Professional Engineers & Geoscientists of Saskatchewan
CERTIFICATE OF AUTHORIZATION
WSP CANADA INC.
Number C0855
Expiry Date
ELECTRONICALLY APPROVED

Revision/ Revision	Description/Description	Date/Date
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1	ISSUED FOR ADDENDUM 3	12/04/2018
0	ISSUED FOR TENDER	25/01/2018

Client/client

CORRECTIONAL SERVICE CANADA

Project title/Titre du projet

SASKATCHEWAN PENITENTIARY ELECTRICAL UPGRADES 2017

Approved by/Approuve par
BKB

Designed by/Concept par
WSM

Drawn by/Dessine par
WSM

PWGSC Project Manager/Administrateur de Projets TPSGC

PWGSC, Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'Ingénierie, TPSGC

Client/client
CORRECTIONAL SERVICE CANADA

Drawing title/Titre du dessin

PACKAGE 5 - UNIT 8 UPGRADES ELECTRICAL SITE PLAN

Project No./No. du projet	Sheet/ Feuille	Revision no./ La Révision no.
R.080653.001	E1-05-01 OF XX	1

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