

TO VALVE REFER TO DRAWING WG-E0001

3/C#10 TECK TO VALVE
8C#12 TECK
3PR #16 TECK

3/C#8 TECK
16C#12 TECK
3PR #16 TECK

6000x19 GROUND ROD BONDED TO
GROUND CONDUCTOR USING CADWELD
CONNECTION (TYPICAL FOR FOUR)

4/0 COPPER GROUND CONDUCTOR
BURIED AT 300 BELOW FINISHED GRADE

CORE HOLES IN MANHOLE CABLE
PULL BOX TO TERMINATE CONCRETE
DUCT BANK

3C#8 TECK
16C#12 TECK
3PR #16 TECK

USE EXISTING SPARE CONDUIT

750mm VENTILATED
CABLE TRAY

TJB-D22

EXISTING 600V CDP-100

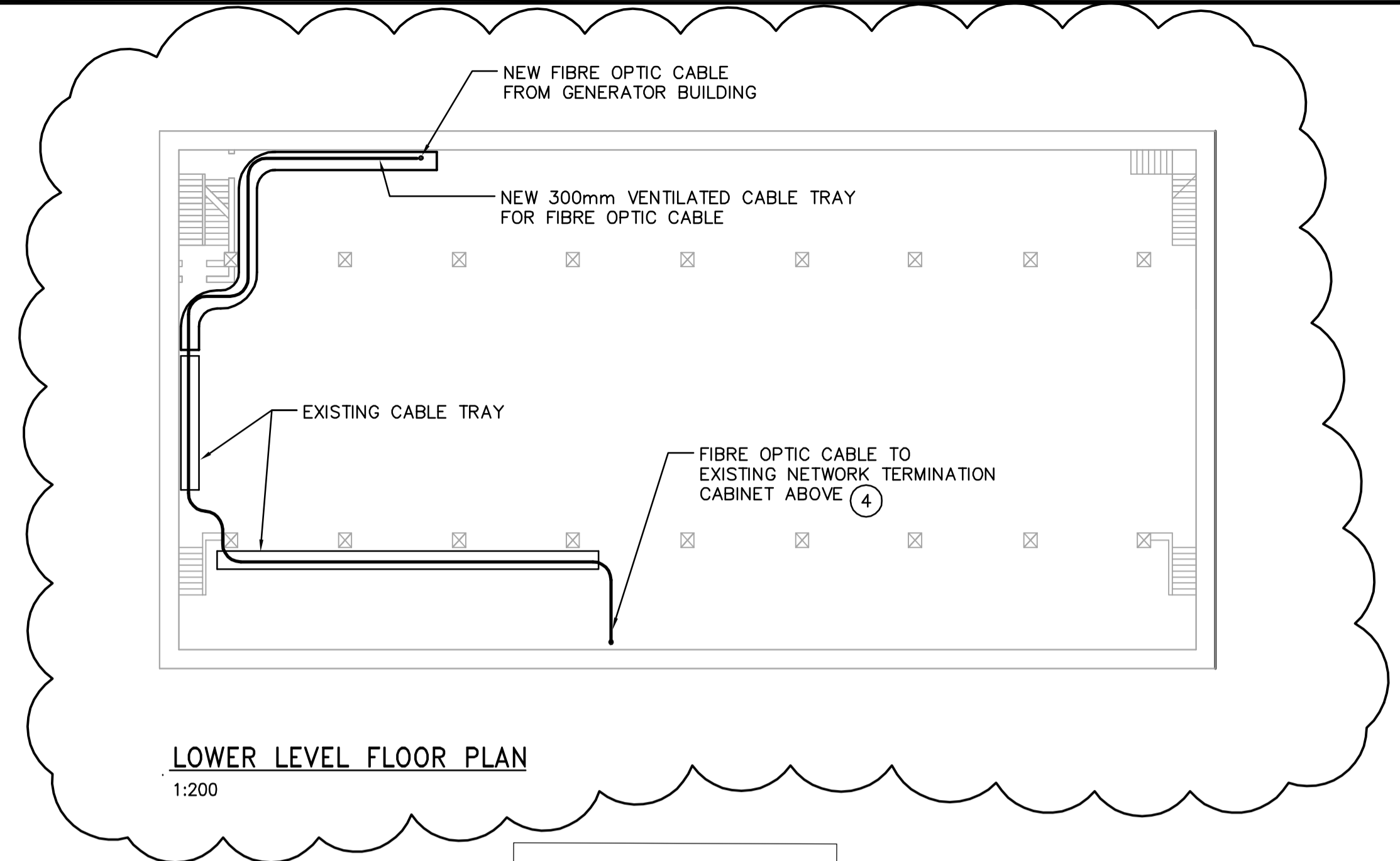
MAIN INCOMING BREAKER

EXISTING DBPS 4160V DISTRIBUTION
TO BE MODIFIED (FUTURE)

UNUSED INCOMING BREAKER

DEACON BOOSTER PUMPING STATION

EXISTING NETWORK
TERMINATION CABINET



LOWER LEVEL FLOOR PLAN
1:200

VALVE CHAMBER BUILDING
REFER TO DRAWING WY-E0122

DRAWING NOTES

- 1 CONDUCTORS FROM GENERATOR BUILDING SWGR-E100A BREAKER BK-103A. NEW BREAKER IN DBPS 4160V DISTRIBUTION WILL BE SUPPLIED AND INSTALLED BY OTHERS IN APPROXIMATELY THE SAME LOCATION AS EXISTING BREAKER. PROVIDE EXTRA 6 METRES OF CABLE LENGTH FOR TERMINATION AT NEW BREAKER. SECURE OPEN END OF NEW CABLE GROUNDING ALL CURRENT CONDUCTORS AGAINST ACCIDENTAL ENERGIZATION. LOCK OUT BREAKER BK-103A IN OPEN POSITION.
- 2 CONDUCTORS FROM GENERATOR BUILDING SWGR-E100B BREAKER BK-103B. TERMINATE IN UNUSED BREAKER IN DBPS 4160V DISTRIBUTION. LOCK OUT BREAKER IN OPEN POSITION. PROGRAM BREAKER SETTINGS ACCORDING TO SETTINGS PROVIDED BY CONTRACT ADMINISTRATOR.
- 3 CORE OPENINGS BELOW GRADE. SUPPLY AND INSTALL ROXTEC RS SEALS COMPLETE WITH ACID PROOF STAINLESS STEEL FITTINGS SIZED TO SUIT CABLES.
- 4 INSTALL FIBRE OPTIC CABLE IN NEW AND EXISTING CABLE TRAY. TERMINATE CABLE IN EXISTING NETWORK TERMINATION CABINET LOCATED IN CONTROL ROOM. PROVIDE PATCH PANEL AND TERMINATION KITS.
- 5 CONNECT GROUND CONDUCTORS EMBEDDED IN CONCRETE DUCT BANK TO GROUND GRID INSIDE PULL BOX USING CADWELD CONNECTION. SUPPLY AND INSTALL TWO (2) 4/0 GREEN INSULATED COPPER CONDUCTORS FROM PULL BOX TO SWITCHGEAR, ONE CABLE TO EACH END OF THE 5kV EQUIPMENT. PROVIDE SUFFICIENT LENGTH TO TERMINATE ON GROUND BUS BUT DO NOT TERMINATE.

GENERAL NOTES

1. COORDINATE WITH OTHER TRADES TO PREVENT CONFLICTS.
2. USE PVC JACKETED TECK CABLE FOR ALL POWER WIRING.
3. ALL CONDUIT TO BE 21mmØ MINIMUM UNLESS OTHERWISE NOTED.

FLOOR PLAN ABOVE ELEVATION 230.80
1:100

APEGM
Certificate of Authorization
Earth Tech Canada Inc.
No. 730 Expiry: April 30, 2007

NO.	REVISIONS	DATE	BY
02	498-2006 ADDENDUM 4	06/10/10	ERC
01	498-2006 ADDENDUM 3	06/09/29	ERC
00	ISSUED FOR TENDER	06/08/30	ERC

CH2M HILL
Frederickson Cooper
ARCHITECTS

EarthTech
A Teck International Ltd. Company

DESIGNED BY: BLM
CHECKED BY: PS
DRAWN BY: ERC
APPROVED BY: AHL
SCALE: AS SHOWN
RELEASED FOR CONSTRUCTION BY: R. SOROKOWSKI
DATE: 2007/07/27
DATE: 2006/08/30

ENGINEER'S SEAL
ORIGINAL SIGNED BY: B.L. MOORE
2006/08/30
CONSULTANT DRAWING NO. WD-E0112

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

WATER TREATMENT PLANT
STANDBY POWER GENERATOR

ELECTRICAL
DBPS FLOOR PLAN

CITY FILE NUMBER
SHEET OF
CITY DRAWING NUMBER
1-060D-A-E012-001-02D