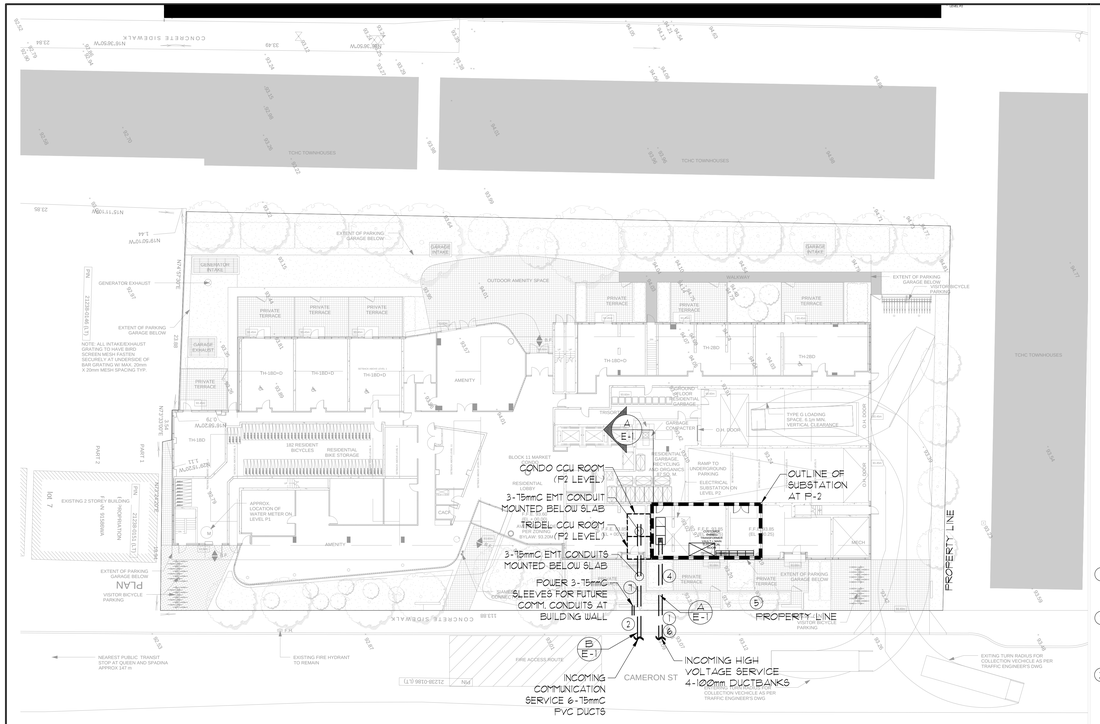
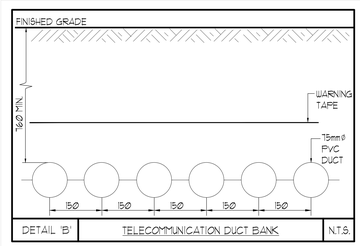
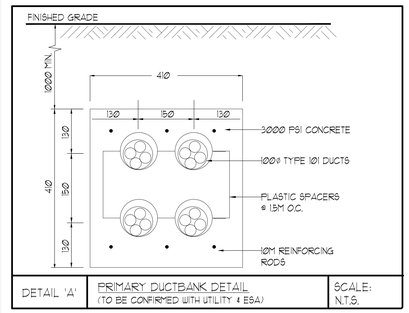
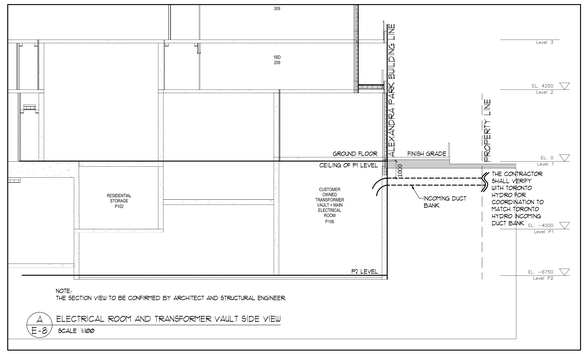


SITE PLAN







NOTE:
THE SECTION VIEW TO BE CONFIRMED BY ARCHITECT AND STRUCTURAL ENGINEER.

A E-8 ELECTRICAL ROOM AND TRANSFORMER VAULT SIDE VIEW
SCALE 1:100

ACOUSTIC NOTES:

1. THE POWER TRANSFORMER LOCATED IN THE CUSTOMER OWNED SUBSTAION SHOULD BE SELECTED FOR LOW NOISE. TRANSFORMERS WITH COOLING FANS SHOULD BE AVOIDED. TRANSFORMER CORES SHOULD BE INTERNALLY ISOLATED WITH SPRINGS OR NEOPRENE-IN-SHEAR MOUNT.

2. NOTWITHSTANDING THE TYPE OF TRANSFORMER SELECTED, THE UNIT MUST BE WELL ISOLATED. A 150mm THICK HOUSEKEEPING PAD POURED ON 50mm THICK UNDERLAY (2 LAYERS OF 150-SEP HD OR EQUIVALENT) SHOULD BE INCLUDED BELOW THE UNIT. THE INCOMING DUCT BANK MUST BE WELL ISOLATED AT ANY POINTS OF SUSPENSION FROM UNDERSIDE OF THE GROUND FLOOR SLAB OR ANY SHEAR WALLS USING RUBBER COMPRESSION MOUNTS IN SERIES WITH THE RODS SUPPORTING THE UNISTRUT ASSEMBLIES TO WHICH THE CABLES OR CONDUITS ARE ATTACHED, OR RUBBER PADS OR SLEEVES IN CLAMPS.

3. 300KVA- 450KVA TRANSFORMERS WHICH ARE LOCATED BELOW SUITES SHOULD BE ISOLATED ON DOUBLE LAYER RUBBER PADS (25mm THICK, 50 DUROMETER MAXIMUM). ALL CONDUITS OR CABLES THAT ARE SUSPENDED FROM THE GROUND FLOOR SLAB ABOVE SHOULD BE VIBRATION ISOLATED AT ANY POINT OF SUSPENSION FROM THE STRUCTURE USING RUBBER COMPRESSION MOUNTS IN SERIES WITH THE RODS SUPPORTING THE UNISTRUT ASSEMBLIES TO WHICH THE CABLES OR CONDUITS ARE ATTACHED, IN A MANNER SIMILAR TO THAT DESCRIBED ABOVE. CONDUITS OR CABLES FOR THESE TRANSFORMERS SHOULD NOT BE BURIED IN THE GROUND FLOOR SLAB, BUT SURFACE MOUNTED TO FACILITATE ISOLATION.

4. AN ISOLATED HOUSEKEEPING PAD SHALL BE INSTALLED BELLOW THE TRANSFORMERS (SIZED AT 300KVA OR ABOVE) AND ASSOCIATED SWITCHGEAR.

5. SMALLER TRANSFORMERS (45kVA to 75kVA) LOCATED IN P1 AND ON THE ROOF, SHALL BE ISOLATED ON NSN PADS.

6. ALL TRANSFORMERS ARE TO BE ISOLATED ON DOUBLE-LAYER RUBBER PADS (25mm THICK, 50 DUROMETER MAXIMUM).

7. TRANSFORMER HOUSE KEEPING PADS SHALL BE POURED ON 2 LAYERS OF DURACOUSTIC. TRANSFORMER CASING SHALL BE ISOLATED FROM THE HOUSE KEEPING PADS WITH DOUBLE-LAYER RUBBER PADS.

8. THE GENERATOR SHALL BE LOCATED ON A 100mm THICK HOUSEKEEPING CONCRETE PAD ABOVE THE FLOATING FLOOR. THE GENERATOR SUPPORTED FROM THIS HOUSEKEEPING PAD WITH SPRING ISOLATORS HAVING A NORMAL 25mm STATIC DEFLECTION, WITH RIBED RUBBER PADS UNDER THE SPRING BASE.

9. BACK TO BACK ELECTRICAL OUTLETS ARE TO BE AVOIDED IN SUITE DEMISING WALL. THEY SHOULD BE STAGGERED BY A MINIMUM OF 12" (IN CONCRETE WALLS) OR 1 STUD SPACE (" IN DRYWALL), TO PREVENT REDUCING THE SOUND INSULATION PERFORMANCE OF THOSE WALLS. THIS ALSO APPLIES TO COMMUNICATIONS OUTLETS AND SWITCHES.

KEY NOTES:

(1) ELECTRICAL CONTRACTOR TO PROVIDE CONCRETE ENCASED DUCT BANKS AND TO VERIFY ON SITE EXACT LOCATION AND DEPTH OF HV CABLES FOR MATCH-UP WITH HV DUCTS AT PROPERTY LINE. INSTALLATION OF HV CABLES AND TERMINATION ARE DONE BY TORONTO HYDRO.

(2) ELECTRICAL CONTRACTOR SHALL PROVIDE 6-4" DUCTS FOR TELECOMMUNICATION SERVICES FROM THE BUILDING UP TO PROPERTY LINE. INSTALLATION OF CABLES AND TERMINATION UP TO THE PROPERTY LINE ARE DONE BY THE ELECTRICAL CONTRACTOR. TELECOMMUNICATION SERVICE PROVIDERS ARE RESPONSIBLE FOR DUCTS AND CABLING BEYOND PROPERTY LINE.

(3) PROVIDE RAMP SNOW MELTING C/W THE FOLLOWING:

QTY.	TYPE	CAT.#	DESCRIPTION
RAMP, 600V, 3Ø.			
3	EA	SUB13006	MI HEATING CABLE - 462 FEET, 1300W, 600V, WITH 15 FEET COLD LEADS + MADE TO ORDER
6	EA	HARD-SPACER-GALV-25MM-25M	GALVANIZED STEEL PRE-PUNCH STRAPPING 25M
2	EA	SMCS	SNOW MELTING CAUTION SIGN
CONTROLS - DISTRIBUTION & GROUND FAULT PROTECTION INCLUDED			
1	EA	SMPG3-6.00-3-1/3PI/50)-3R-100	AUTOMATIC SNOW/ICE MELTING SYSTEM CONTROLLER - 208/240V
1	EA	CIT-1	AUTOMATIC SNOW SENSOR
AS REQ.	EA	SIT-6E	ESTIMATED FREIGHT AT 3.5% FLAT RATE
AS REQ.	EA	FREIGHT	ESTIMATED FREIGHT FOR ALL MADE TO ORDER ITEMS TBD AT TIME OF ORDER

(4) ALL UNDERGROUND INSTALLATION OF ELECTRICAL DUCTS/CONDUITS SHALL COMPLY WITH THE LATEST ESA CODE RULE 12-Ø12 (BULLETIN 12-2-15), WHICH SPECIFIES "CONTINUOUS RED PLASTIC MARKER TAPES WITH BLACK LETTERS IDENTIFYING THE POWER LINE UNDERGROUND INSTALLATION.

I) PLACED APPROXIMATELY HALF WAY BETWEEN THE INSTALLATION AND GRADE LEVEL,
II) INSTALLED COVERING THE WIDTH OF THE INSTALLATION, AND
III) WHERE MULTIPLE MARKER TAPES ARE REQUIRED TO COVER THE WIDTH OF THE INSTALLATIN MARKER TAPES SHALL BE PERMITTED TO BE PLACED A MAXIMUM OF 600mm APART.

(5) RUN 1" CONDUIT TO GENERATOR CONTROL PANEL AND CACF ROOM FROM INCOMING GAS STATION CONTROL VALVE.

(6) ELECTRICAL CONTRACTOR SHALL KEEP CLEARANCE 600mm HORIZONTAL AND 300mm VERTICAL BETWEEN SERVICES GAS LINE AND HYDRO DUCT BANK.

(7) COMMUNICATION CONDUIT REQUIREMENTS:
a) PLACE 24" PULL BOX ON BUILDING WALL WHERE ENTRANCE SUB DUCT ENTERS BUILDING SO DUCT CAN BE SEALED AFTER ENTRANCE CABLE IS PLACED TO PREVENT WATER AND GASES SEEPING INTO BUILDING.
b) CONDUIT TERMINATION AT THE PROPERTY LINE TO BE MARKED WITH A 2"x4" STAKED INTO THE GROUND APPROXIMATELY 3' HIGH MARKED "WITH THE NAME OF COMMUNICATION PROVIDER".
c) INSIDE THE BUILDING, CONDUIT MUST BE EMT (FIRE RATED ELECTRICAL METALLIC TUBING) 89mm (3.5") OR 100mm (4") INSIDE DIAMETER, TO ENSURE THE SUCCESSFUL PLACEMENT AND TO AVOID DAMAGING THE CABLE DURING THE PLACING OPERATION. "I METER" PULL BOXES ARE REQUIRED AT 90 DEGREE BENDS WITHIN THE BUILDING.
d) CONDUIT LENGTHS OVER 30m HAVE A PULL ROPE.
e) ALL CONDUITS TO BE FREE AND CLEAR OF OBSTRUCTIONS AS A BLOCKAGE AT THE TIME OF CABLE PLACEMENT WILL RESULT IN A DELAY OF SERVICE UNTIL THE PATH HAS BEEN CLEARED AT THE OWNER'S EXPENSE.
f) 4'x8'x3/4" FIRE RETARDANT PLYWOOD BACKBOARD FASTENED TO WALL IN AN AREA ACCESSIBLE WITHOUT THE USE OF A LADDER WHERE IT IS POSSIBLE FOR A TECHNICIAN TO WORK WITHOUT BLOCKING A PASSAGEWAY AND WHERE THE EQUIPMENT MOUNTED WILL NOT BE DAMAGED BY DOORS OR ANY MOVING OBJECTS.

(8) REFER TO LANDSCAPE DRAWINGS FOR DETAILED LAYOUT. LANDSCAPE LIGHTS SHALL BE CONTROLLED E A TIMER/CONTACTOR (C) LOCATED NEAR 'ELP-E2' AND CONNECT TO 'ELP-E2'. LIGHTS 'LI' SHALL BE CONTROLLED BY PHOTOCELL.

(9) THE CONTRACTOR SHALL VERIFY WITH TORONTO HYDRO FOR COORDINATION TO MATCH TORONTO HYDRO DUCT BANK.

(10) THE CONTRACTOR SHALL VERIFY THE LOCATION OF TELECOMMUNICATION DUCT BANK WITH BELL/ROGERS

(11) THE EXACT LOCATION TO BE CONFIRMED WITH THE OWNER

ALEXANDRA PARK (#1313)
ELECTRICAL DRAWING LIST

		SCALE	ISSUED FOR PERMIT MAY 30/2014
E-1	SITE PLAN	1:200	√
E-1A	SITE LANDSCAPE PLAN	1:200	√
E-2	P-2 FLOOR PLAN - ELECTRICAL LAYOUT	1:100	√
E-3	P-1 FLOOR PLAN - ELECTRICAL LAYOUT	1:100	√
E-4	G/F SOUTH FLOOR PLAN - LIGHTING LAYOUT	1:50	√
E-5	G/F NORTH FLOOR PLAN - LIGHTING LAYOUT	1:50	√
E-6	G/F SOUTH FLOOR PLAN - POWER LAYOUT	1:50	√
E-7	G/F NORTH FLOOR PLAN - POWER LAYOUT	1:50	√
E-8	2/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-9	2/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-10	3/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-11	3/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-12	4/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-13	4/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-14	5/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-15	5/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-16	6/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-17	6/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-18	7/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-19	7/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-20	8/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-21	8/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-22	9/F SOUTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-23	9/F NORTH FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-24	10/F FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-25	11/F FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-26	12/F FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-27	13/F FLOOR PLAN - ELECTRICAL LAYOUT	1:50	√
E-28	14/F FLOOR PLAN - ELECTRICAL LAYOUT	N.T.S.	√
E-29	ROOF FLOOR PLAN - ELECTRICAL LAYOUT	N.T.S.	√
E-30	SINGLE LINE DIAGRAM	N.T.S.	√
E-31	SUITE DISTRIBUTION PANEL, TELECOM & SECURITY RISER DIAGRAMS	N.T.S.	√
E-32	FIRE ALARM RISER DIAGRAM	N.T.S.	√
E-33	FIRE ALARM SCHEDULES AND DETAILS	N.T.S.	√
E-34	ELECTRICAL PANEL SCHEDULES	N.T.S.	√
E-35	ELECTRICAL DETAILS	N.T.S.	√
E-36			
E-37			
E-38			
E-39			

ELECTRICAL LEGEND

LIGHTING

	FLUORESCENT LIGHT FIXTURE, TYPE AS INDICATED
EM	NIGHT LIGHT OR LIGHT CONNECTED TO EMERGENCY POWER
A / 20A	CEILING MOUNTED/WALL MOUNTED LIGHT FIXTURE, INSCRIBED LETTER DENOTES TYPE
A / 20A	POLE MOUNTED LIGHT FIXTURE, INSCRIBED LETTER DENOTES TYPE
	CAPPED CEILING LIGHT OUTLET
	TRACK LIGHT
	STEP LIGHT
	UNDER CABINET FLUORESCENT LIGHT FIXTURE
	CEILING MOUNTED/WALL MOUNTED EXIT SIGN
	SINGLE/DUAL EMERGENCY LAMP REMOTE HEAD
	EMERGENCY BATTERY PACK
PIR	OCCUPANCY SENSOR POWER PACKS
S / $ / $ $3, $4, $P, $D	SINGLE/TGD/THREE POLE, SINGLE/TGD/THREE THROW TOGGLE SWITCH RESPECTIVELY, ('3','4','P','D' DENOTES 3-WAY,4-WAY,PILOT LIGHT, DIMMER SWITCHED LIGHT RESPECTIVELY.)
	MASTER LIGHTING SHUT-OFF SWITCH
	SENSOR WALL SWITCH PIR, SELF POWERED
	OCCUPANCY SENSOR, CEILING MOUNTED

POWER

	REGULAR DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE, GROUND FAULT INTERRUPT
	3-WIRE T-SLOT DUPLEX RECEPTACLE
	SINGLE RECEPTACLE TYPE AND CONFIGURATION AS SPECIFIED FOR DIMTER
	CONNECTION FOR OVEN/COOKTOP
	ABOVE COUNTER DEVICE
	CEILING MOUNTED DEVICES
	FLOOR MOUNTED DEVICES
	DISCONNECT SWITCH, NON-FUSED
	DISCONNECT SWITCH, FUSED
	COMBINATION STARTER
	FRACTIONAL MOTOR/FAN DIRECT CONNECTION
	DIRECT CONNECTION, SINGLE PHASE
	DIRECT CONNECTION, THREE PHASE
T	THERMOSTAT
D	DRYER SENSOR
	HEAT TRACE
2500W	ELECTRICAL HEATER
	ELECTRICAL PANEL / SECURITY PANEL

TELECOMMUNICATION

TV	TV/CABLE OUTLET
T	TELEPHONE OUTLET
TV T	TELEPHONE/TV CABLE (MULTI-PORT OUTLET)
D	DATA OUTLET
T	DATA/TELEPHONE OUTLET
CR	IN SUITE TELEOPPY BOX C/W RECEPTACLE
WFI	WIFI LOCATION
PA / MS	MUSIC SPEAKER / VOLUME CONTROL
RR	RADIO RECEIVER

SECURITY

C / INT	INTERCOM / ENTERPHONE
CM	INTERCOM WITH CAMERA
MS / PSM	PANIC BUTTON / PANIC INTERCOM STATION
CR	CARD READER
ARSG / SRR	AUTOMATIC RELEASE CARD ACCESS/RADIO RECEIVER
ES	ELECTRIC STRIKE
ML	MAGLOCK
DC / MC	DOOR CONTACT / WINDOW CONTACT
DO	AUTOMATIC DOOR OPERATOR
MD	MOTION DETECTOR
P	PUSH BUTTON
	SECURITY CAMERA

LIFE SAFETY

	FIRE ALARM SMOKE DETECTOR
	SPACE ALARM
	FIRE ALARM DUCT TYPE SMOKE DETECTOR
	FIRE ALARM HEAT DETECTOR
	FIXED TEMP. 88 °C DEGREE HEAT DETECTOR
	MOISTURE PROOF HEAT DETECTOR
	CO ALARM
	COMBINATION SMOKE & CO ALARM
	CO SENSOR / NO SENSOR
	FIRE ALARM MANUAL PULL STATION
	FIREFIGHTER'S HANDSET
	FIRE ALARM STROBE+HORN, WALL MTD.
	FIRE ALARM TYH+HORN, WALL MTD.
	FIRE ALARM SPEAKER/STROBE CEILING MTD.
	FIRE ALARM SPEAKER, CEILING MTD.
FACP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL

05/30/14	ISSUED FOR PERMIT	ST.
DATE NO.	DESCRIPTION	BY

MARK VOID ALL PRINTS DATED PREVIOUS TO FINAL DATE ABOVE

REVISIONS

CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB AND REPORT DISCREPANCIES TO THE ENGINEERS BEFORE PROCEEDING WITH THE WORK. DRAWINGS ARE THE PROPERTY OF THE ENGINEER AND MUST BE RETURNED UPON COMPLETION OF THE WORK.

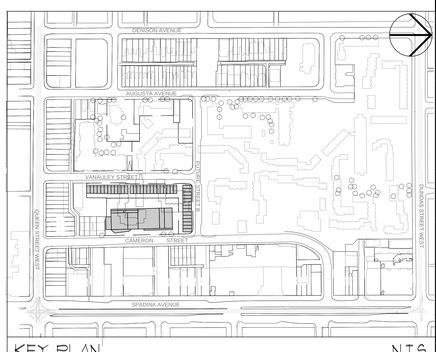
DRAWINGS ARE NOT TO BE SCALED

NOVA TREND ENGINEERING GROUP LTD.
LICENSED PROFESSIONAL ENGINEER 05/30/14 S.T.-P. TAM
179 West Beaver Creek Road, Unit 31
Richmond Hill, Ontario L4B 3M1
Tel: 905 882-5445
Fax: 905 882-5447
Email: cad@novatrendeng.com

DRAWING TITLE: SITE PLAN

PROJECT TITLE: ALEXANDRA PARK
XXX TORONTO ONTARIO

DRAWN BY:	CHECKED BY:	SCALE:
S.O.	S.T.	1:200
DATE: FEB. 13	PROJECT NUMBER: 1313	DRAWING NUMBER: E-1 OF



Drawing name: \\CADSERVER\Current Dwg\1313 - Alexandra Park\DWG\1313E - 1 (SITE PLAN).dwg Plotted: May 29, 2014 - 5:06pm