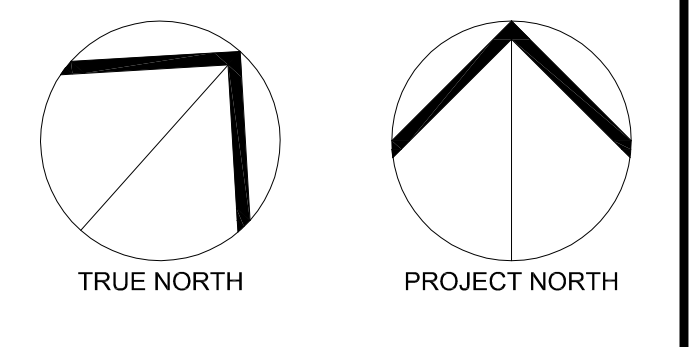


ELECTRICAL DRAWING LIST	
DRAWING No.	DESCRIPTION
SP-E01	ELECTRICAL: LEGEND, DRAWING LIST & SITE PLAN
SP-E02	ELECTRICAL: SCHEDULES & DETAILS

THESE DESIGN DOCUMENTS ARE PREPARED SOLELY FOR THE USE BY THE PARTY WITH WHOM THE DESIGN PROFESSIONAL HAS ENTERED INTO A CONTRACT AND THERE ARE NO REPRESENTATIONS OF ANY KIND MADE BY THE DESIGN PROFESSIONAL TO ANY PARTY WITH WHOM THE DESIGN PROFESSIONAL HAS NOT ENTERED INTO A CONTRACT.

THE PAPER COPY OF THE DRAWINGS ISSUED FOR BUILDING PERMIT AND/OR TENDER WILL TAKE PRECEDENCE OVER ELECTRONIC COPIES.



ELECTRICAL LEGEND	
○	DOWNSHAFT FIXTURE, LETTER DENOTES TYPE.
○	WALL MOUNTED FIXTURE, LETTER DENOTES TYPE.
1-AAZ	EXTERIOR LIGHT STANDARD FIXTURE, LETTER DENOTES TYPE.
⊕	15A, 120V, DUPLEX GFI RECEPTACLE C/W WEATHER PROOF ENCLOSURE.
⊞	JUNCTION BOX.
⊙	HARD WIRED CONNECTION TO EQUIPMENT.
---	U/G RACEWAY FOR COMMUNICATION SERVICES.
---	U/G RACEWAY FOR POWER SERVICES.
ABBREVIATIONS:	
HP	- HEIGHT
GFI	- GROUND FAULT INTERRUPTER
WP	- WEATHER PROOF
U.O.N.	- UNLESS OTHERWISE NOTED
N.T.S.	- NOT TO SCALE
N.I.C.	- NOT IN CONTRACT
C/W	- COMPLETE WITH
U/G	- UNDER GROUND
POW	- POWER SERVICES
COMMS	- COMMUNICATION SERVICES

- GENERAL NOTES**
- ROUTING OF THE INCOMING BURIED SERVICES IS A PROPOSED DIAGNOSTIC ROUTING, COORDINATE WITH CIVIL DRAWINGS, LANDSCAPE DRAWINGS, AND HYDRO ONE ON SITE PRIOR TO COMMENCING WORK TO FINALIZE ROUTING.
 - THE UTILITY CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A SITE MEETING WITH THE GENERAL CONTRACTOR, HYDRO ONE AND THE ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION OF BUILDING POWER SUPPLY INFRASTRUCTURE. THE PURPOSE OF THE MEETING IS TO COORDINATE THE WORK, REVIEW THE RESPONSIBILITIES OF HYDRO ONE, THE GENERAL CONTRACTOR, THE UTILITY CONTRACTOR AND THE ELECTRICAL CONTRACTOR TO ENSURE THAT THE INSTALLATION OF THE TRANSFORMER AND CABLE DUCTS ADHERE TO HYDRO ONE SPECIFICATIONS AND ESA REQUIREMENTS.
 - SITE CONDUITS FOR LIGHTING AND RECEPTABLES ARE NOT SHOWN. UTILITY AND ELECTRICAL CONTRACTORS ARE TO PROVIDE LAYOUT AND COORDINATE.
 - PROVIDE MINIMUM #8 AWG CONDUCTOR SIZE FOR SITE LIGHTING. ALL LIGHTING CONDUITS SHALL BE MINIMUM 53mm RIGID PVC. PROVIDE FINAL CONNECTIONS TO ELECTRICAL PANELS ONCE THEY ARE INSTALLED DURING BUILDING CONSTRUCTION.
- DRAWING NOTES**
- TRANSITION FROM UTILITY OVERHEAD SERVICE TO UNDERGROUND SERVICE AT THIS LOCATION. PROVIDE 3x(1/2" x 1/4") COPPER ALPO 486V, SEC WITH 53% CONCENTRIC NEUTRAL IN DUCT BANK, ONE CABLE PER DUCT TO CUSTOMER OWNED POLE ON PROPERTY AS SHOWN. HYDRO ONE TO MAKE FINAL CONNECTIONS.
 - PROVIDE 18-8ft (65'-0") CLASS 1 CONCRETE POLE US94H-650-1-T-PC AND 200A LOAD BREAK 3 POLE GANG OPERATED SWITCH WITH 30A FUSES. POLE TO BE BURIED MINIMUM 2.50m (8'-0") IN THE GROUND WITH ENGINEERED BASE TO SUIT EQUIPMENT WEIGHT. PROVIDE US W SERIES ENTRY BOXES AND RUN LOAD WIRING HOSE. POLE RUN LINE WIRING SURFACE MOUNTED ON THE BACK OF THE POLE. TRANSITION FROM OVERHEAD SERVICES TO LOAD BREAK SWITCH AND UP BACK DOWN TO UNDERGROUND SERVICE AT THIS LOCATION. PROVIDE GROUNDING AND CABLE GUARDS AS PER SPECIFICATIONS AND AS PER CESC REQUIREMENTS.
 - PROVIDE NEW CUSTOMER OWNED TRANSFORMER C/W 2108mm x 2238mm US-4-15PS PRECAST BASE. PROVIDE PRIMARY GROUNDING AS PER CESC BULLETIN 56-10-20 FOR TAMPER RESISTANT EQUIPMENT. COORDINATE WORK WITH HYDRO ONE AND INSPECTION AUTHORITY.

1 SITE PLAN
SP-E01 1:250

REVISION No.	DESCRIPTION	DATE
1.	ISSUED FOR SITE PLAN APPLICATION	JUL 05/19

MCKEE ENGINEERING
R.J. MCKEE
ENGINEERING LTD.
1785 Woodland Drive
Kanata, ON K2C 1P9
CANADA
TEL: (613) 723-9888
FAX: (613) 723-9884
www.mckeeeng.ca

PROJECT:
KINAXIS OFFICE BUILDING
8700 CAMPEAU DRIVE
KANATA, ONT.

DRAWING:
ELECTRICAL:
LEGEND, DRAWING LIST
& SITE PLAN

DATE: JUNE 2019
DESIGNED BY: M.O.
DRAWN BY: M.O.
CHECKED BY: G.O.M.
SCALE: AS SHOWN

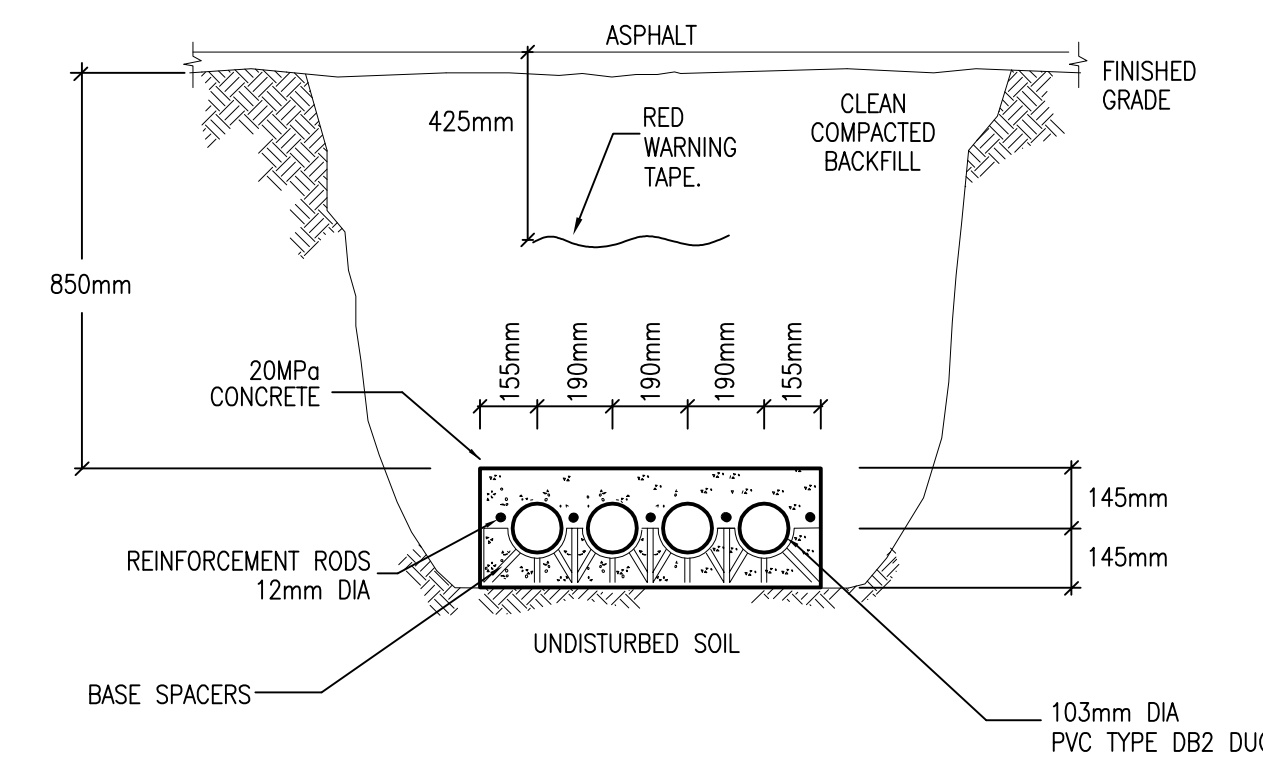
No. DWGS: 2
PROJECT No. 19147
DRAWING No. SP-E01

SITE PLAN LIGHTING FIXTURE SCHEDULE							
TYPE	DESCRIPTION	LAMPS	LED DIMMING DRIVER	DIMMING RANGE	VOLT	MOUNTING	REMARKS
4-AA5	POLE MOUNTED FIXTURE EQUAL TO EATON 'GLEON' SERIES	4-59W LED	0-10V	10-100%	347	SQUARE ALUMINUM POLE 10.7m ABOVE GRADE	- 6697 LUMENS, 4000K, 70 CRI, TYPE SMD DISTRIBUTION - FULL CUT-OFF - FACTORY INSTALLED DIMMING OCCUPANCY SENSOR - BLACK, MOUNTING HT. INCLUDES HT. OF BASE
1-AA3	POLE MOUNTED FIXTURE EQUAL TO EATON 'GLEON' SERIES	1-34W LED	0-10V	10-100%	347	SQUARE ALUMINUM POLE 3.657m ABOVE GRADE	- 4201 LUMENS, 4000K, 70 CRI, TYPE T38 DISTRIBUTION - 800mA DRIVER, FULL CUT-OFF - FACTORY INSTALLED DIMMING OCCUPANCY SENSOR - BLACK, MOUNTING HT. INCLUDES HT. OF BASE
2-AA2	POLE MOUNTED FIXTURE EQUAL TO EATON 'GLEON' SERIES	2-59W LED	0-10V	10-100%	347	SQUARE ALUMINUM POLE 10.7m ABOVE GRADE	- 6697 LUMENS, 4000K, 70 CRI, TYPE SLD2 DISTRIBUTION - FULL CUT-OFF - FACTORY INSTALLED DIMMING OCCUPANCY SENSOR - BLACK, MOUNTING HT. INCLUDES HT. OF BASE
1-AA2	POLE MOUNTED FIXTURE EQUAL TO EATON 'GLEON' SERIES	1-113W LED	0-10V	10-100%	347	SQUARE ALUMINUM POLE 10.7m ABOVE GRADE	- 12205 LUMENS, 4000K, 70 CRI, TYPE SLD2 DISTRIBUTION - FULL CUT-OFF - FACTORY INSTALLED DIMMING OCCUPANCY SENSOR - BLACK, MOUNTING HT. INCLUDES HT. OF BASE
1-AA	POLE MOUNTED FIXTURE EQUAL TO EATON 'GLEON' SERIES	1-59W LED	0-10V	10-100%	347	SQUARE ALUMINUM POLE 10.7m ABOVE GRADE	- 5604 LUMENS, 4000K, 70 CRI, TYPE SLD2 DISTRIBUTION - FULL CUT-OFF - FACTORY INSTALLED DIMMING OCCUPANCY SENSOR - BLACK, MOUNTING HT. INCLUDES HT. OF BASE
BB	BUILDING MOUNTED FIXTURE EQUAL TO EATON 'GWC' SERIES	34W LED	0-10V	10-100%	347	SURFACE WALL MOUNTED	- 4204 LUMENS, 4000K, 80 CRI, TYPE T2 DISTRIBUTION - 800mA DRIVER - FULL CUT-OFF, BLACK FINISH
CC	CANOPY LIGHT FIXTURE EQUAL TO COOPER 'T1' SERIES	28W LED	0-10V	10-100%	347	SURFACE	- 3500 LUMENS, 4000K, 80 CRI - WIDE DISTRIBUTION - FACTORY INSTALLED DIMMING OCCUPANCY SENSOR - BLACK FINISH
D	150mm DOWNLIGHT FIXTURE EQUAL TO EATON HALO 'HCS/HMS' SERIES	14.2W LED	0-10V	1-100%	347	RECESSED	- 1000 LUMENS, 4000K, 80 CRI - IC RATED HOUSING, IP65 RATED BELOW FINISHED CEILING - FACTORY INSTALLED 347-120V STEPDOWN TRANSFORMER - MEDIUM 60° BEAM ANGLE, WHITE FINISH

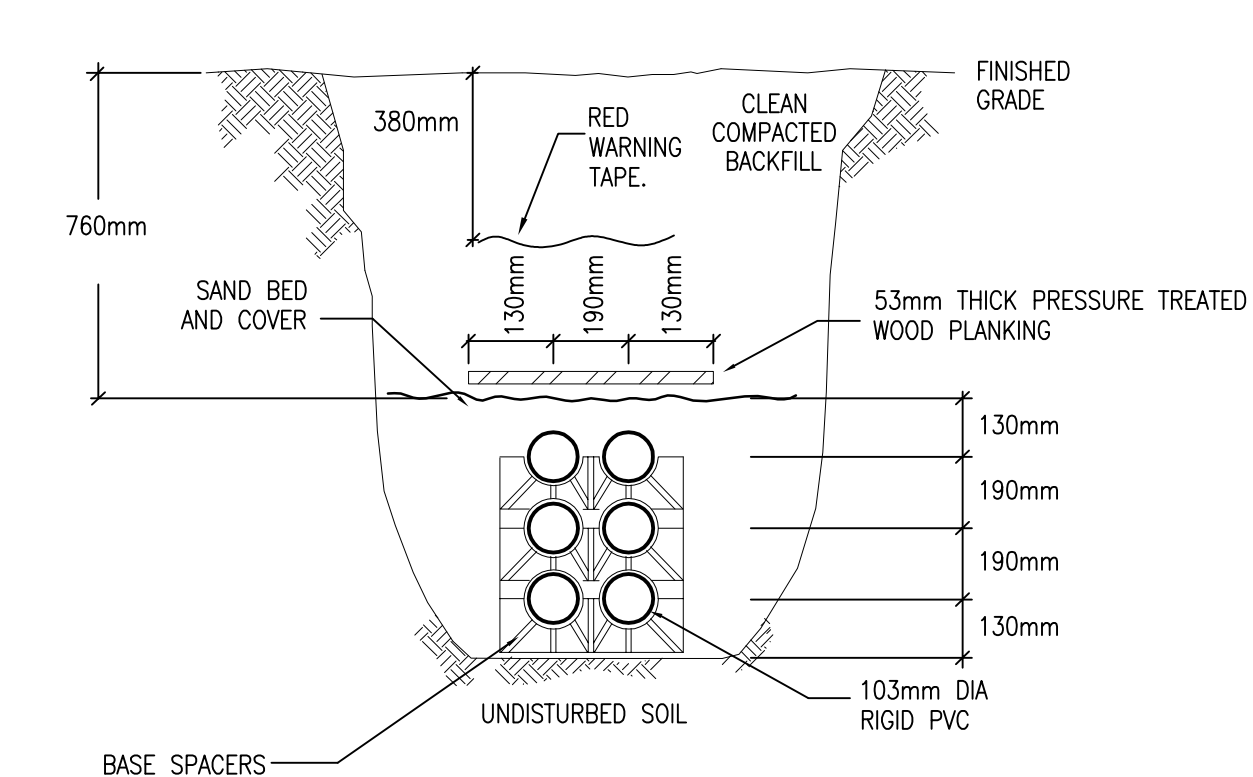
NOTE: PROVIDE HAND-HELD WIRELESS CONFIGURATION REMOTE FOR SUCCESSFUL IMPLEMENTATION OF PROGRAMMING, A MINIMUM OF TWO (2) HAND-HELD REMOTES ARE REQUIRED.

STATISTICS

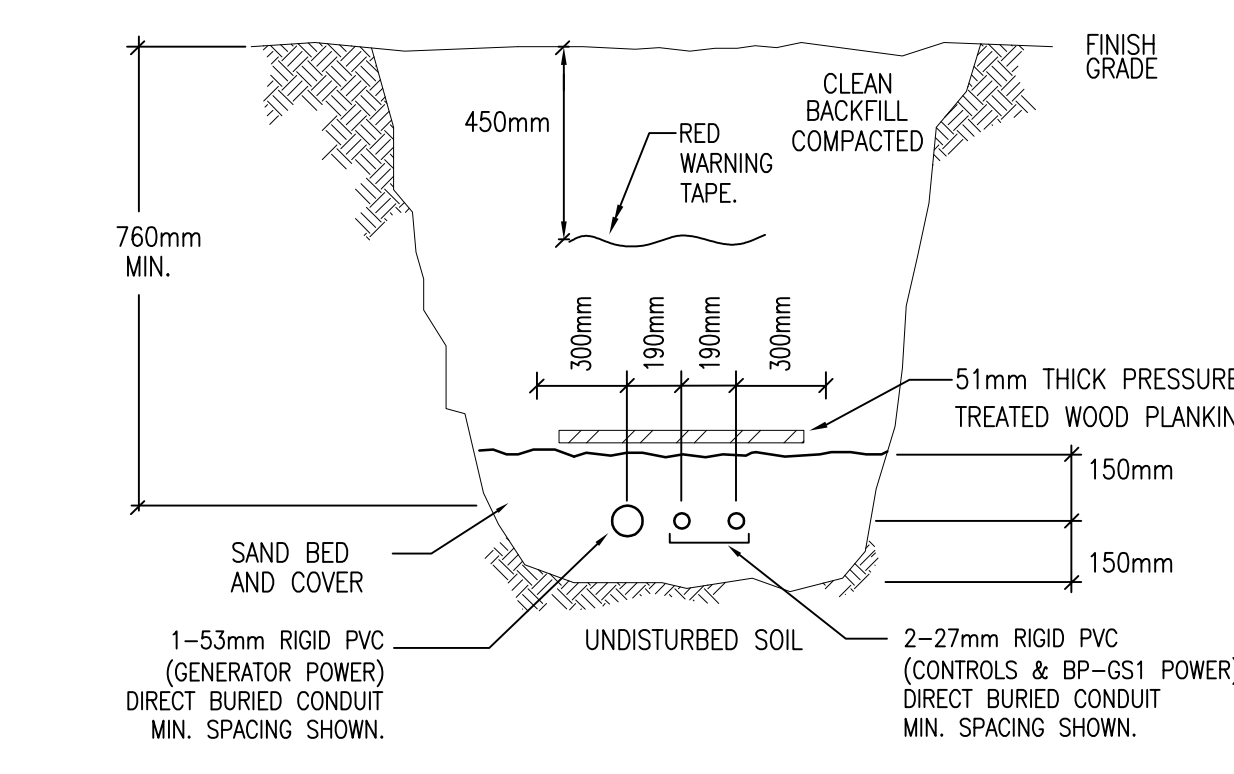
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Landscaped Garden	+	0.9 fc	2.9 fc	0.0 fc	N / A	N / A
Main Entrance	+	2.0 fc	10.6 fc	0.0 fc	N / A	N / A
Parking Lot	+	1.4 fc	2.7 fc	0.1 fc	27.0:1	14.0:1
Property Line	+	0.0 fc	0.5 fc	0.0 fc	N / A	N / A
Rear Entrance	+	4.8 fc	9.4 fc	1.1 fc	8.5:1	4.4:1



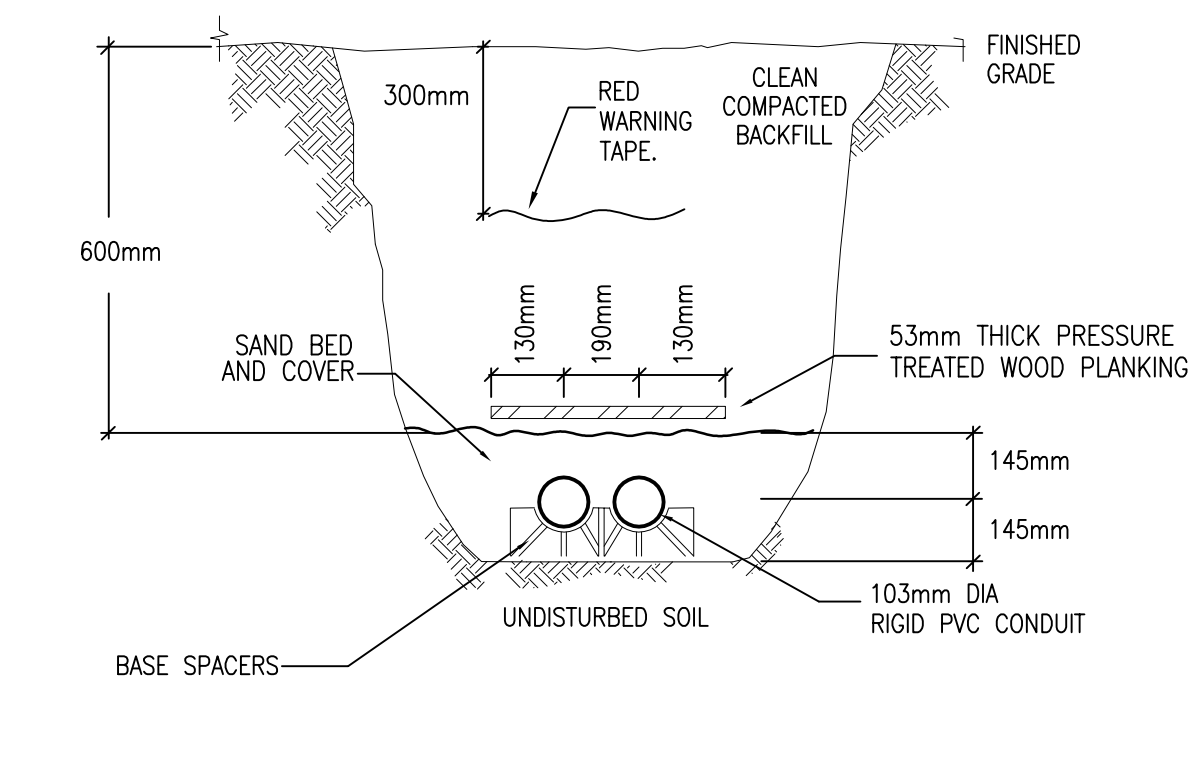
1 TRENCH DETAIL - PRIMARY 4 CELL
SP-E02 CONCRETE ENCASED
N.T.S.



2 TRENCH DETAIL - SECONDARY 6 CELL
SP-E02 DIRECT BURIED
N.T.S.

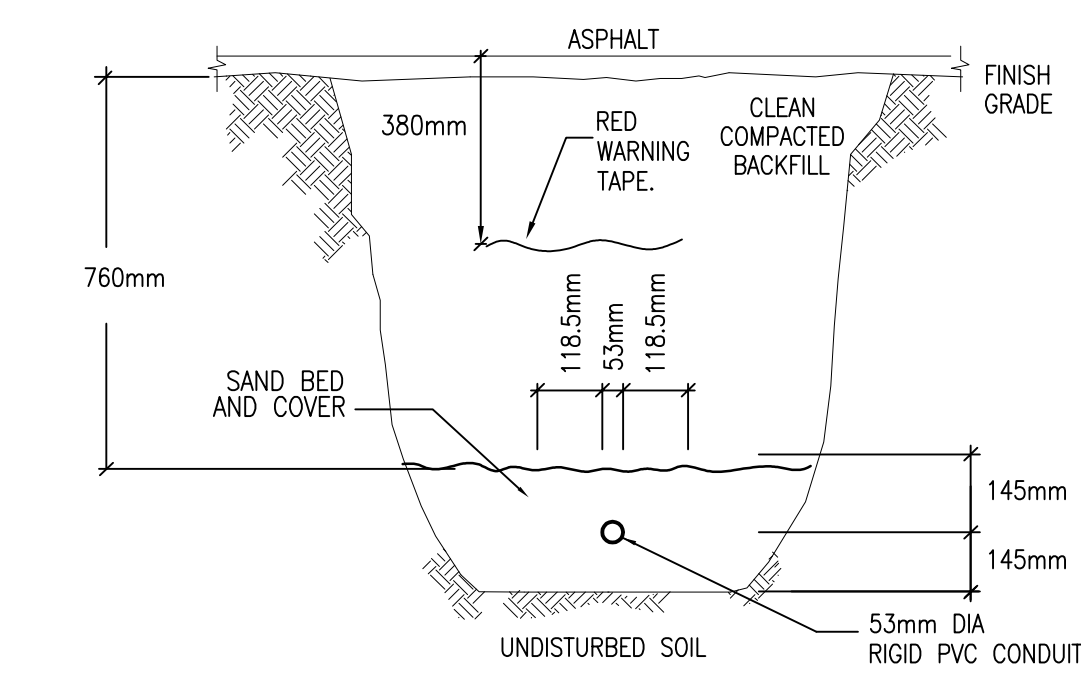


3 GENERATOR TRENCH DETAIL
SP-E02 DIRECT BURIED
N.T.S.

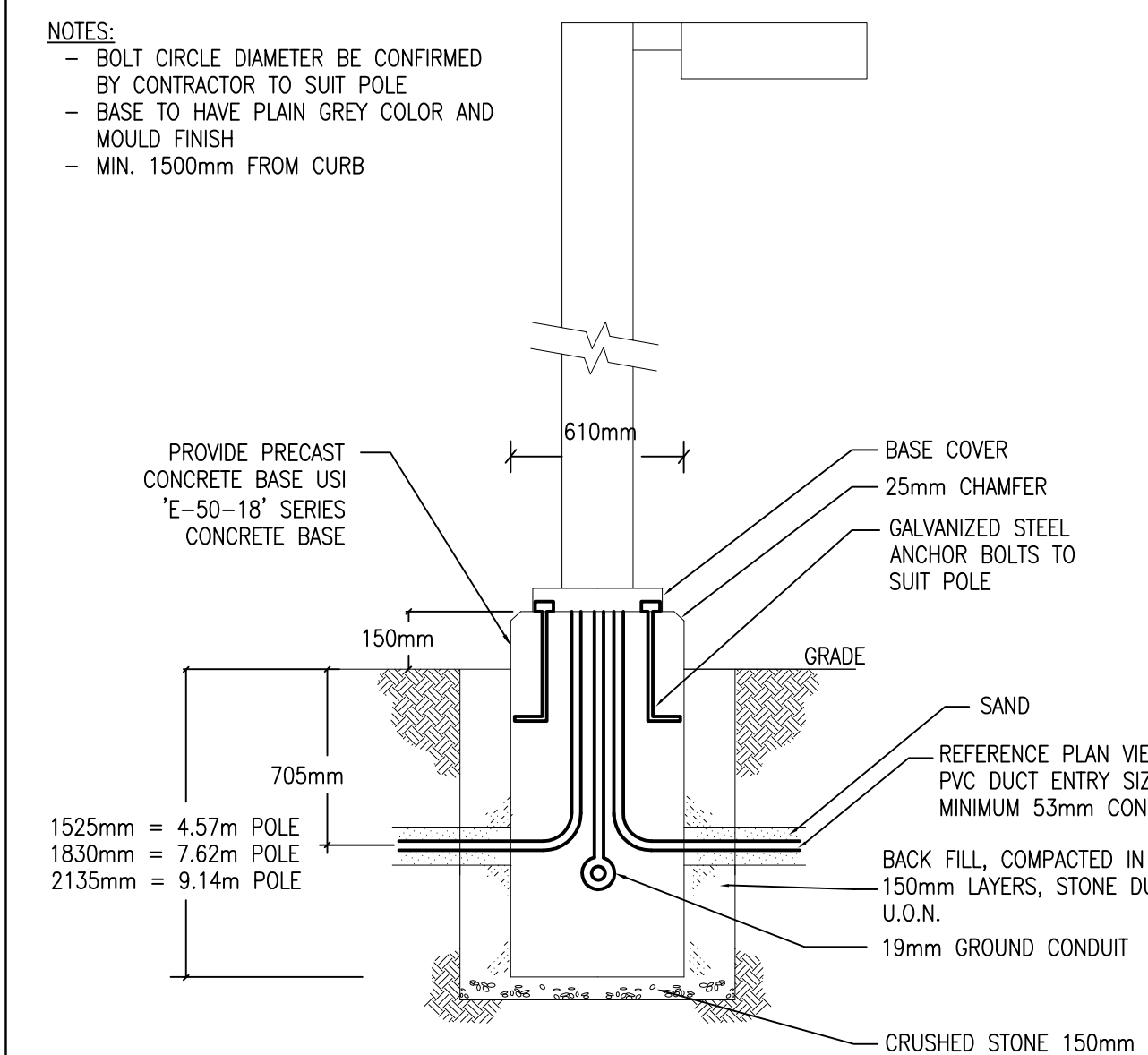


4 TRENCH DETAIL - COMMUNICATION 2 CELL
SP-E02 DIRECT BURIED
N.T.S.

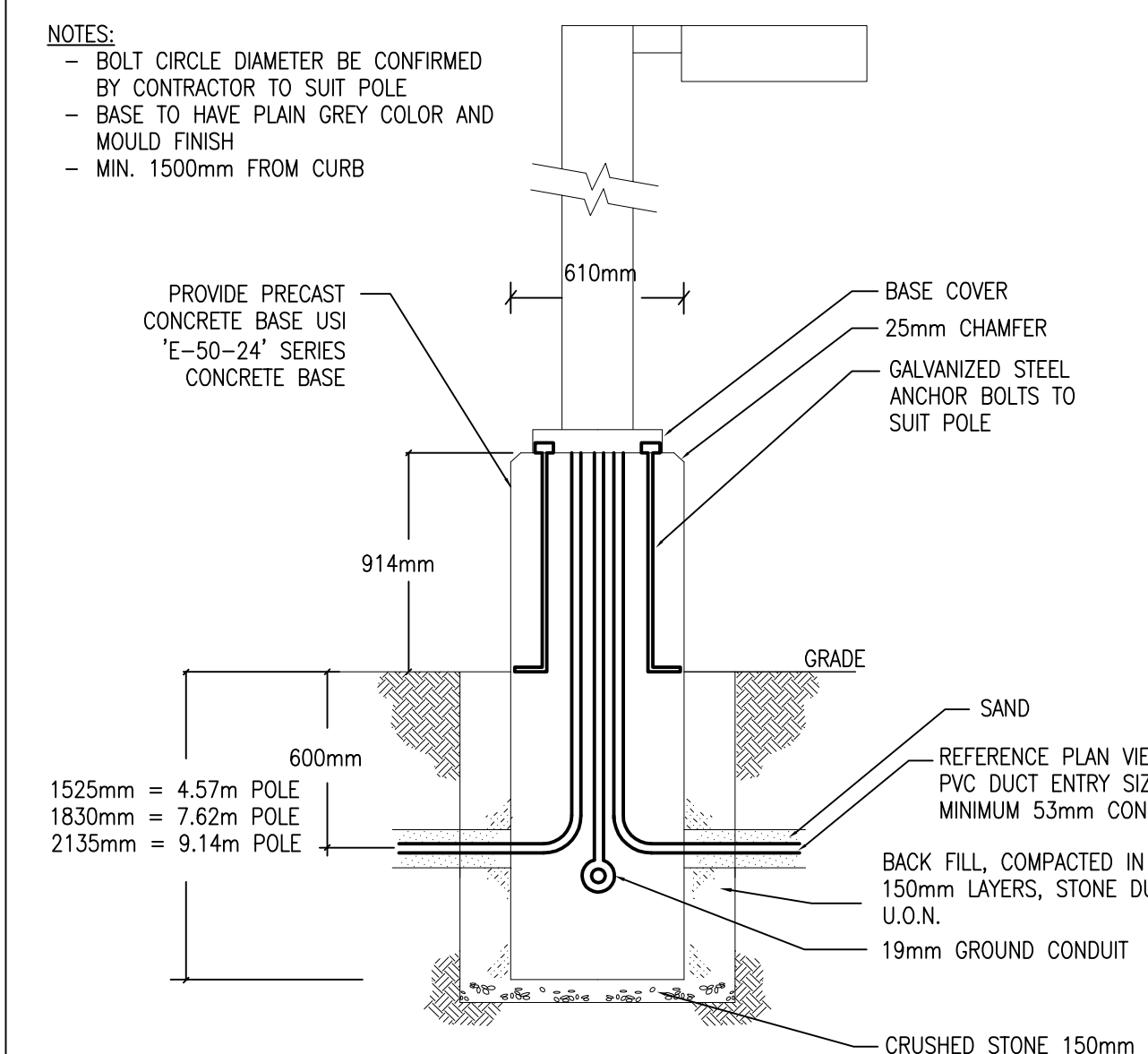
SEPARATE CONDUIT MINIMUM OF 300mm FROM HYDRO AND OTHER TELECOMMUNICATION SERVICES.



5 DIRECT BURIED CONDUIT FOR EXTERIOR
SP-E02 LIGHTING STANDARDS OR POWER
N.T.S.



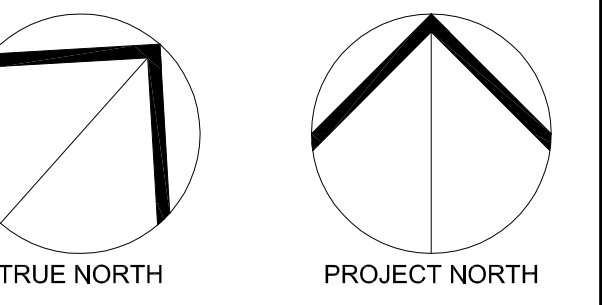
6 MOUNTING OF LAMP POST BASE
SP-E02 CURVED AREAS
N.T.S.



7 MOUNTING OF LAMP POST BASE
SP-E02 PARKING LOT AREAS (NO CURBS)
N.T.S.

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R.J. MCKEE
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1785 Woodland Drive
Guelph, ON N1C 1P9
CANADA
TEL: (519) 723-9888
FAX: (519) 723-9884
www.mckeeengineer.ca

PROJECT:
KINAXIS OFFICE BUILDING
8700 CAMPEAU DRIVE
KANATA, ONT.

DRAWING:
ELECTRICAL:
SCHEDULES & DETAILS

DATE: JUNE 2019
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DRAWN BY: M.O.
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SCALE: N.T.S.

No. DWGS: 2
PROJECT No.:
19147
DRAWING No.:
SP-E02