

# ELECTRICAL LEGEND

⊙	LIGHT FIXTURE, LETTER DENOTES TYPE.
⊙	BOLLARD FIXTURE, LETTER DENOTES TYPE.
⊙	WALL MOUNTED FIXTURE, LETTER DENOTES TYPE.
⊙	EXTERIOR LIGHT STANDARD FIXTURE, LETTER DENOTES TYPE.
⊙	HARD WIRED CONNECTION TO EQUIPMENT.
⊙	120V WEATHERPROOF DUPLEX RECEPTACLE ON DEDICATED CIRCUIT FOR BLOCK HEATER.
⊙	FUTURE ELECTRICAL VEHICLE CHARGING STATION. PROVIDE 1-53mmC (PWR) AND 1-53mmC (COMM) TO EACH LOCATION.
---	U/G RACEWAY FOR COMMUNICATION SERVICES.
---	U/G RACEWAY FOR POWER SERVICES.

ABBREVIATIONS:	C/W - COMPLETE WITH
HT - HEIGHT	U/G - UNDER GROUND
GF - GROUND FAULT INTERRUPTER	POW - POWER SERVICES
WP - WEATHER PROOF	COMMS - COMMUNICATION SERVICES
U.O.N. - UNLESS OTHERWISE NOTED	AFF - ABOVE FINISHED FLOOR
N.T.S. - NOT TO SCALE	
N.I.C. - NOT IN CONTRACT	

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

# ELECTRICAL DRAWING LIST

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

## GENERAL NOTES

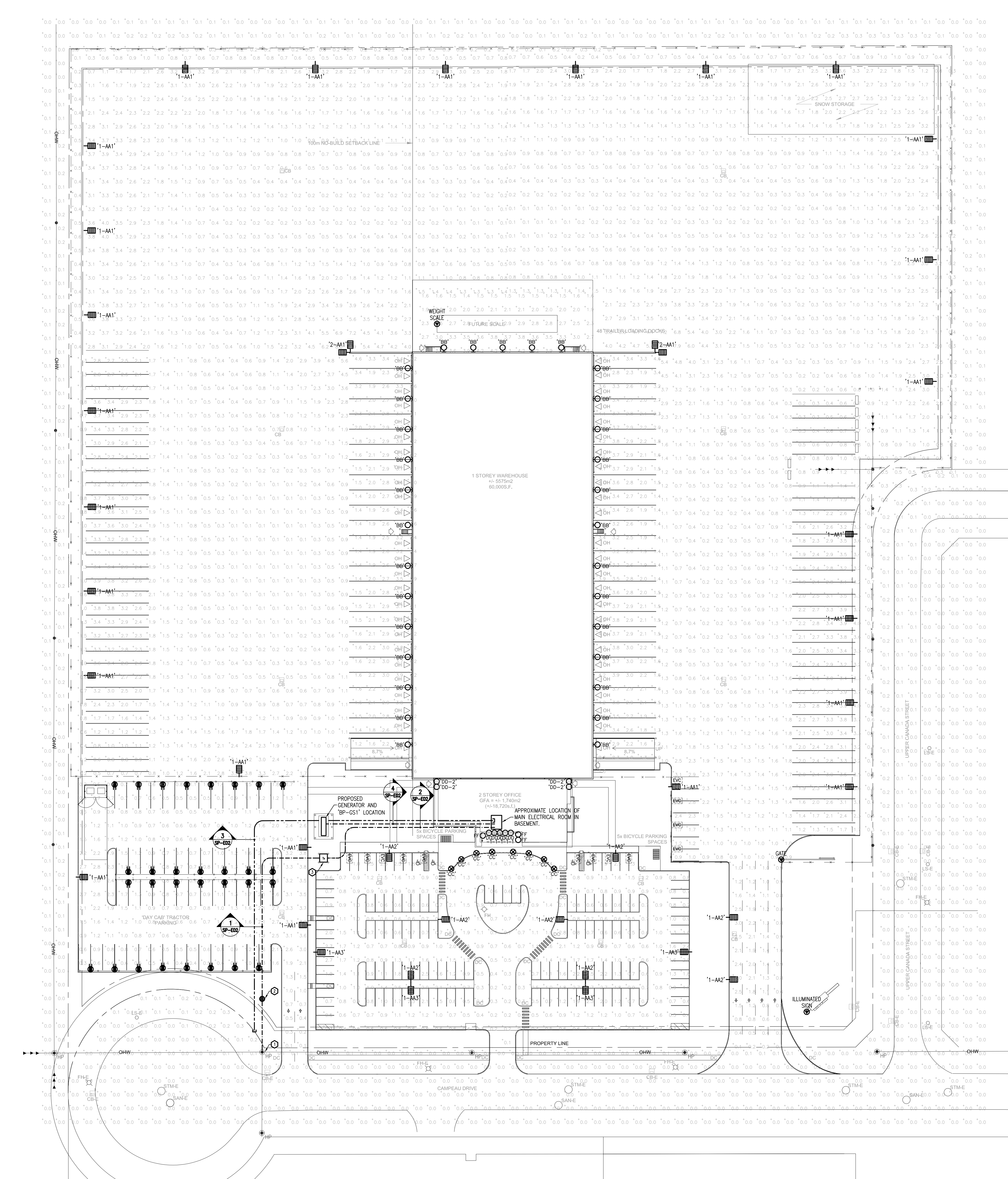
- ROUTING OF THE INCOMING BURIED SERVICES IS A PROPOSED DIAGRAMMATIC ROUTING. COORDINATE WITH CIVIL DRAWINGS, LANDSCAPE DRAWINGS, AND HYDRO ONE ON-SITE PRIOR TO COMMENCING WORK TO FINALIZE ROUTING.
- THE UTILITY CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A SITE MEETING WITH THE GENERAL CONTRACTOR, HYDRO 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.
- SIZE RECEPTACLE CONDUCTORS FOR VOLTAGE DROP AT BOX CIRCUIT LOADING AND PROVIDE A MINIMUM WIRE SIZE OF #6 AWG. PROVIDE FINAL CONNECTIONS TO ELECTRICAL PANELS ONCE THEY ARE INSTALLED DURING BUILDING CONSTRUCTION.
- PROVIDE A PRIMARY GROUND GRID BURIED BENEATH THE EXTERIOR OPEN PARKING AREAS OR GROUND LOOP AROUND PERIMETER OF BUILDING DEPENDING ON LOCAL SOILS RESISTIVITY AND THE RESULTS OF THE GROUND POTENTIAL RISE (GPR) STUDY. REFER TO SPECIFICATIONS.
- COORDINATE MOUNTING HEIGHTS OF BUILDING MOUNTED LIGHT FIXTURES WITH ARCHITECTURAL ELEVATION DETAILS.
- SUPPLY AND INSTALL GUARDS AND STRAPS FOR PRIMARY RISERS ON HYDRO ONE POLE (HYDRO ONE TO INSTALL ON POLE).
- ENSURE TRANSITION OF PRIMARY CABLE AS PER HYDRO ONE DETAILS DU-08-307 AND DU-08-302 (CONCRETE INSTALLATION NOT PERMITTED ON HYDRO ONE OWNED POLES).

## DRAWING NOTES

- PROVIDE OVERHEAD SERVICE CABLES FROM HYDRO ONE POLE TO CUSTOMER OWNED POLE ON PROPERTY AS SHOWN. ALLOW FOR AN ADDITIONAL SUFFICIENT AMOUNT OF CABLES COILED FOR UTILITY CONNECTIONS. HYDRO ONE TO MAKE FINAL CONNECTIONS AND PROVIDE TERMINATIONS AT HYDRO ONE POLE.
- PROVIDE 16.8m (55'-0") CLASS L CONCRETE POLE USA#4-550-1-1-PG AND 200A LOAD BREAK 3 POLE GANG OPERATED SWITCH WITH 30A FUSES. POLE TO BE BURIED MINIMUM 2.59m (8'-6") IN THE GROUND WITH ENGINEERED BASE TO SUIT EQUIPMENT WEIGHT. PROVIDE US 8 SERIES ENTRY BOXES AND RUN LOAD WIRING INSIDE POLE. TRANSFER FROM OVERHEAD SERVICES TO LOAD BREAK SWITCH AND DIP BACK DOWN TO UNDERGROUND SERVICE AT THIS LOCATION. PROVIDE GROUNDING AND CABLE GUARDS AS PER SPECIFICATIONS AND AS PER OESS REQUIREMENTS.
- PROVIDE NEW CUSTOMER OWNED TRANSFORMER C/W 2108mm X 2235mm (8'-10") PRECAST BASE. PROVIDE PRIMARY GROUNDING AS PER OESS BULLETIN 36-10-20 FOR TAMPER RESISTANT EQUIPMENT. COORDINATE WORK WITH HYDRO ONE AND INSPECTION AUTHORITY.

## Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
East Lot	+	1.4	4.5	0.1	54.0:1	14.0:1
East Receiving Bay	+	2.8	4.6	1.0	4.6:1	2.8:1
Coiled Entrance	+	1.2	5.0	0.1	30.0:1	12.0:1
North-East Lot	+	1.3	4.8	0.1	88.0:1	13.0:1
North Receiving Bay	+	2.6	4.3	1.4	3.1:1	1.9:1
North-West Lot	+	1.5	4.8	0.1	89.0:1	15.0:1
Office Entrance East	+	5.3	4.5	4.5	1.0:1	1.0:1
Office Entrance Front	+	5.9	4.3	3.0	2.4:1	2.0:1
Office Entrance West	+	5.3	4.5	4.5	1.0:1	1.0:1
Parking Lot	+	1.1	4.3	0.1	34.0:1	11.0:1
Property Line	+	0.0	4.0	0.0	N/A	N/A
Tractor Parking	+	1.3	4.9	0.1	39.0:1	13.0:1
West Lot	+	1.3	4.5	0.1	56.0:1	13.0:1
West Receiving Bay	+	2.8	4.6	1.0	4.6:1	2.8:1



1 SITE PLAN  
SP-E01  
1:500

1.	ISSUED FOR SITE PLAN CONTROL	DEC 02/20
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REVISION No.	DESCRIPTION	DATE

PROJECT:  
MARITIME-ONTARIO  
OTTAWA  
8800 CAMPEAU DRIVE  
OTTAWA, ON  
K2S 1B9

DRAWING:  
ELECTRICAL:  
LEGEND, DRAWING LIST & SITE PLAN

	DATE: OCTOBER 2020
	DESIGNED BY: N.H.
	DRAWN BY: N.H.
	CHECKED BY: G.O.M. Dec.2/20

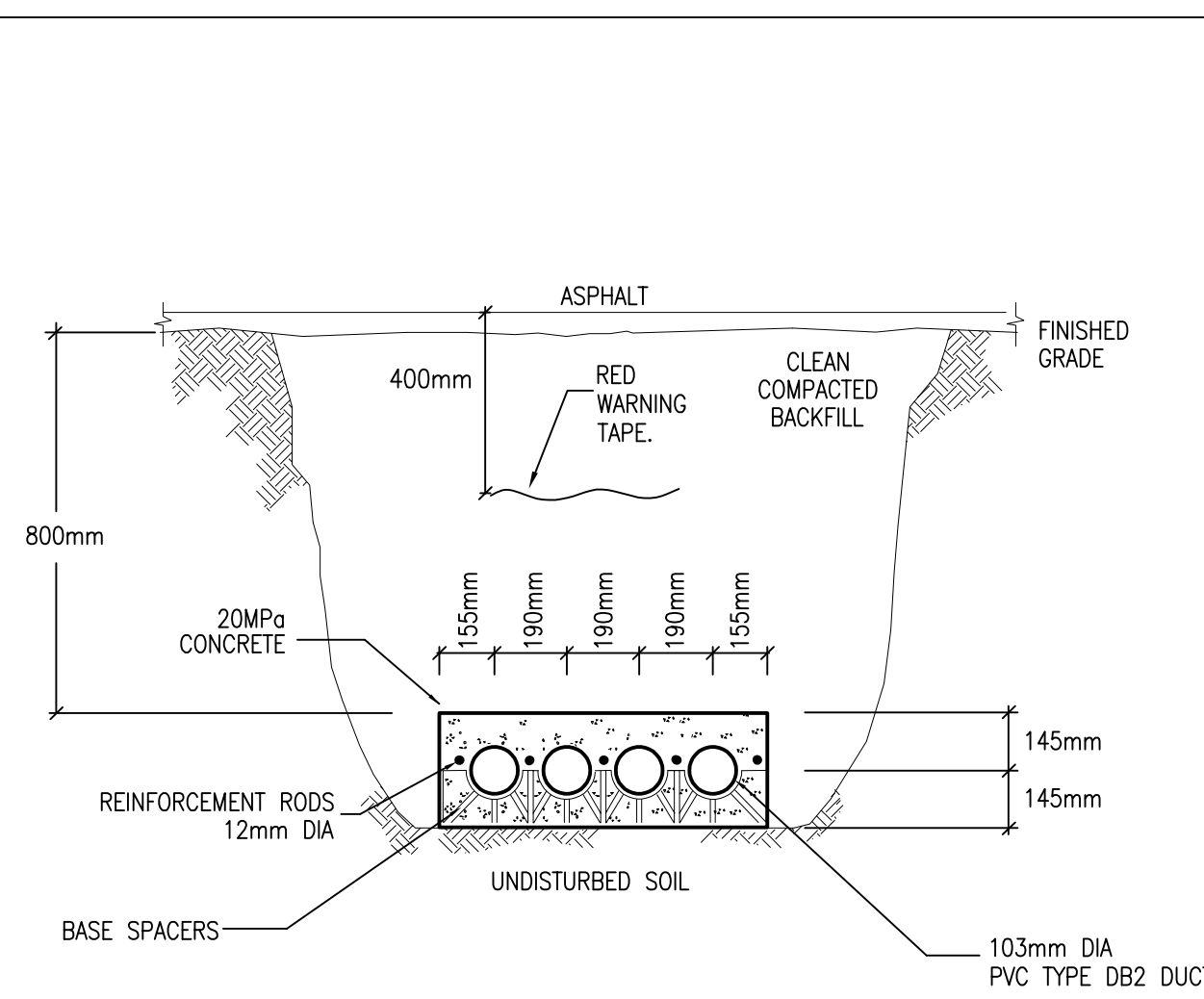
No. DWGS. 2  
PROJECT No. 20071  
DRAWING No. SP-E01

EXTERIOR LIGHTING FIXTURE SCHEDULE									
TYPE	DESCRIPTION	LAMPS	LED DIMMING DRIVER	DIMMING RANGE	VOLT	MOUNTING	REMARKS		
1-AA1	POLE MOUNTED FIXTURE EQUAL TO SIGNIFY GARCCO 'ECF-L' SERIES.	1x238W LED	0-10V	10-100%	120	SQUARE ALUMINUM POLE 10.7m ABOVE GRADE	- 32228 LUMENS, 4000K, 70 CRI, TYPE IV DISTRIBUTION. - FULL CUT-OFF, BACK LIGHT SHIELDING. - FACTORY INSTALLED DIMMING OCCUPANCY SENSOR. - WHITE FINISH, MOUNTING HEIGHT INCLUDES HEIGHT OF BASE.		
2-AA1	POLE MOUNTED FIXTURE EQUAL TO SIGNIFY GARCCO 'ECF-L' SERIES.	2x238W LED	0-10V	10-100%	120	SQUARE ALUMINUM POLE 10.7m ABOVE GRADE	- 64456 LUMENS, 4000K, 70 CRI, TYPE IV DISTRIBUTION. - FULL CUT-OFF, BACK LIGHT SHIELDING. - FACTORY INSTALLED DIMMING OCCUPANCY SENSOR. - WHITE FINISH, MOUNTING HEIGHT INCLUDES HEIGHT OF BASE.		
1-AA2	POLE MOUNTED FIXTURE EQUAL TO SIGNIFY GARCCO 'ECF-S' SERIES.	73W LED	0-10V	10-100%	120	SQUARE ALUMINUM POLE 6.096m ABOVE GRADE	- 9949 LUMENS, 4000K, 70 CRI, TYPE IV DISTRIBUTION. - FULL CUT-OFF, BACK LIGHT SHIELDING. - FACTORY INSTALLED DIMMING OCCUPANCY SENSOR. - WHITE FINISH, MOUNTING HEIGHT INCLUDES HEIGHT OF BASE.		
1-AA3	POLE MOUNTED FIXTURE EQUAL TO SIGNIFY GARCCO 'ECF-S' SERIES.	73W LED	0-10V	10-100%	120	SQUARE ALUMINUM POLE 6.096m ABOVE GRADE	- 9949 LUMENS, 4000K, 70 CRI, TYPE III DISTRIBUTION. - FULL CUT-OFF, BACK LIGHT SHIELDING. - FACTORY INSTALLED DIMMING OCCUPANCY SENSOR. - WHITE FINISH, MOUNTING HEIGHT INCLUDES HEIGHT OF BASE.		
BB	BUILDING MOUNTED FIXTURE EQUAL TO SIGNIFY GARCCO '121' SERIES.	70W LED	0-10V	10-100%	120	SURFACE WALL MOUNTED 7.92m AFF U.O.N.	- 8591 LUMENS, 4000K, 70 CRI, TYPE IV DISTRIBUTION. - FULL CUT-OFF, WHITE FINISH.		
CC	180mm BOLLARD MOUNTED FIXTURE EQUAL TO SIGNIFY GARCCO 'BRM' SERIES.	38.6W LED	0-10V	10-100%	120	1.0m ABOVE GRADE	- 1226 LUMENS, 4000K, 70 CRI, SYMMETRIC DISTRIBUTION. - FULL CUT-OFF, CAST ALUMINUM BASE, WHITE FINISH.		
DD-1	102mm ROUND DOWNLIGHT FIXTURE EQUAL TO SIGNIFY LIGHTOLIER C4RA SERIES.	6W LED	0-10V	10-100%	120	RECESSED CANOPY 3.64m AFF U.O.N.	- 500 LUMENS, 4000K, 90 CRI, SPECULAR FINISH, WHITE FLANGE, MEDIUM BEAM.		
DD-2	152mm ROUND DOWNLIGHT FIXTURE EQUAL TO SIGNIFY LIGHTOLIER C4RA SERIES.	25W LED	0-10V	10-100%	120	RECESSED CANOPY 9.14m AFF U.O.N.	- 2500 LUMENS, 4000K, 90 CRI, SPECULAR FINISH, WHITE FLANGE, MEDIUM BEAM.		
FF	104mm BUILDING UP LIGHT FLOOD FIXTURE EQUAL TO SIGNIFY HADCO FLEXSCAPE LED ILS SERIES.	10W LED			120	RECESSED CONCRETE	- 681 LUMENS, 4000K, 70 CRI, FLOOD BEAM, BLACK FINISH.		

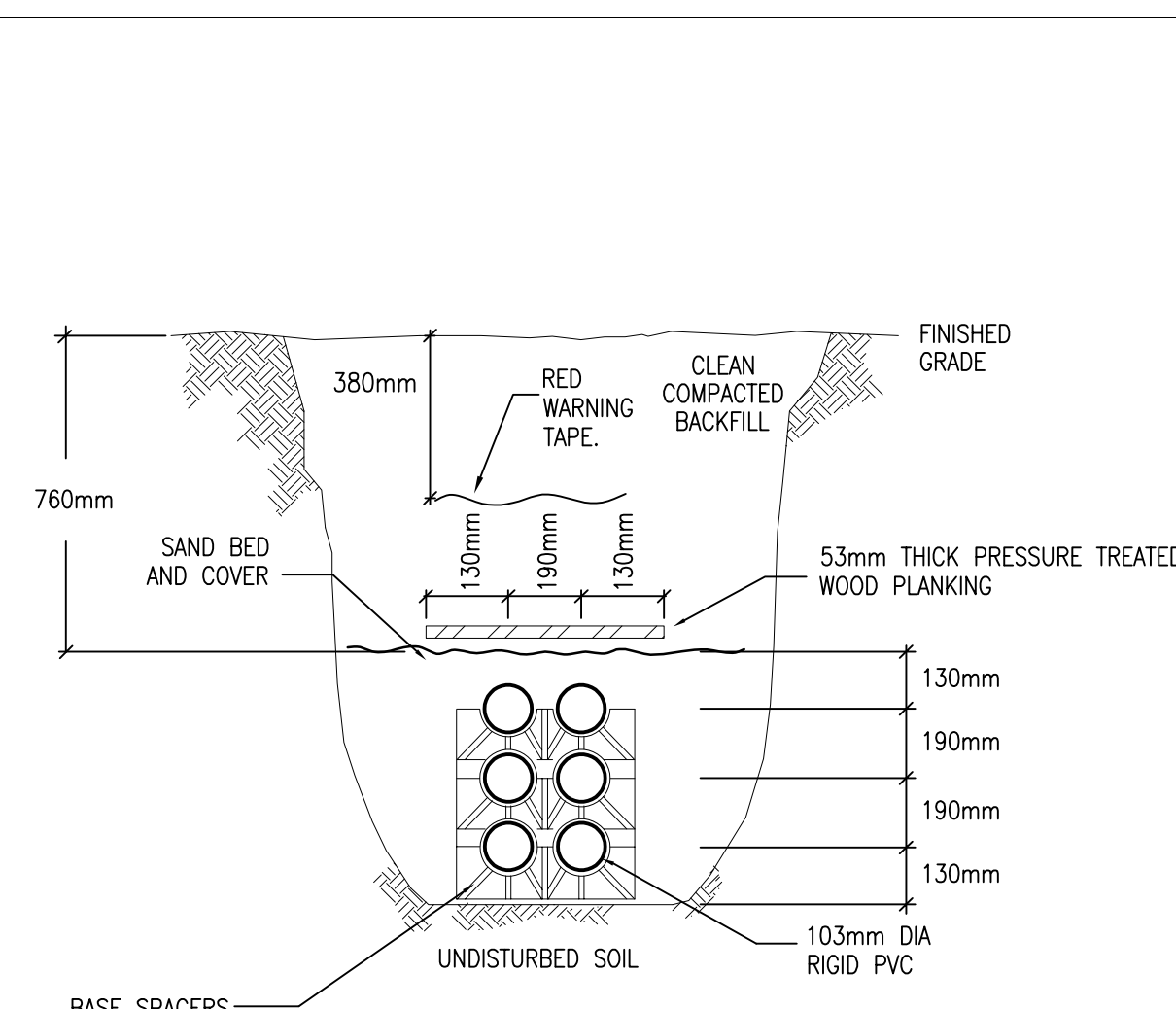
NOTE:  
PROVIDE HAND-HELD WIRELESS CONFIGURATION REMOTE FOR SUCCESSFUL IMPLEMENTATION OF PROGRAMMING, A MINIMUM OF TWO (2) HAND-HELD REMOTES ARE REQUIRED.

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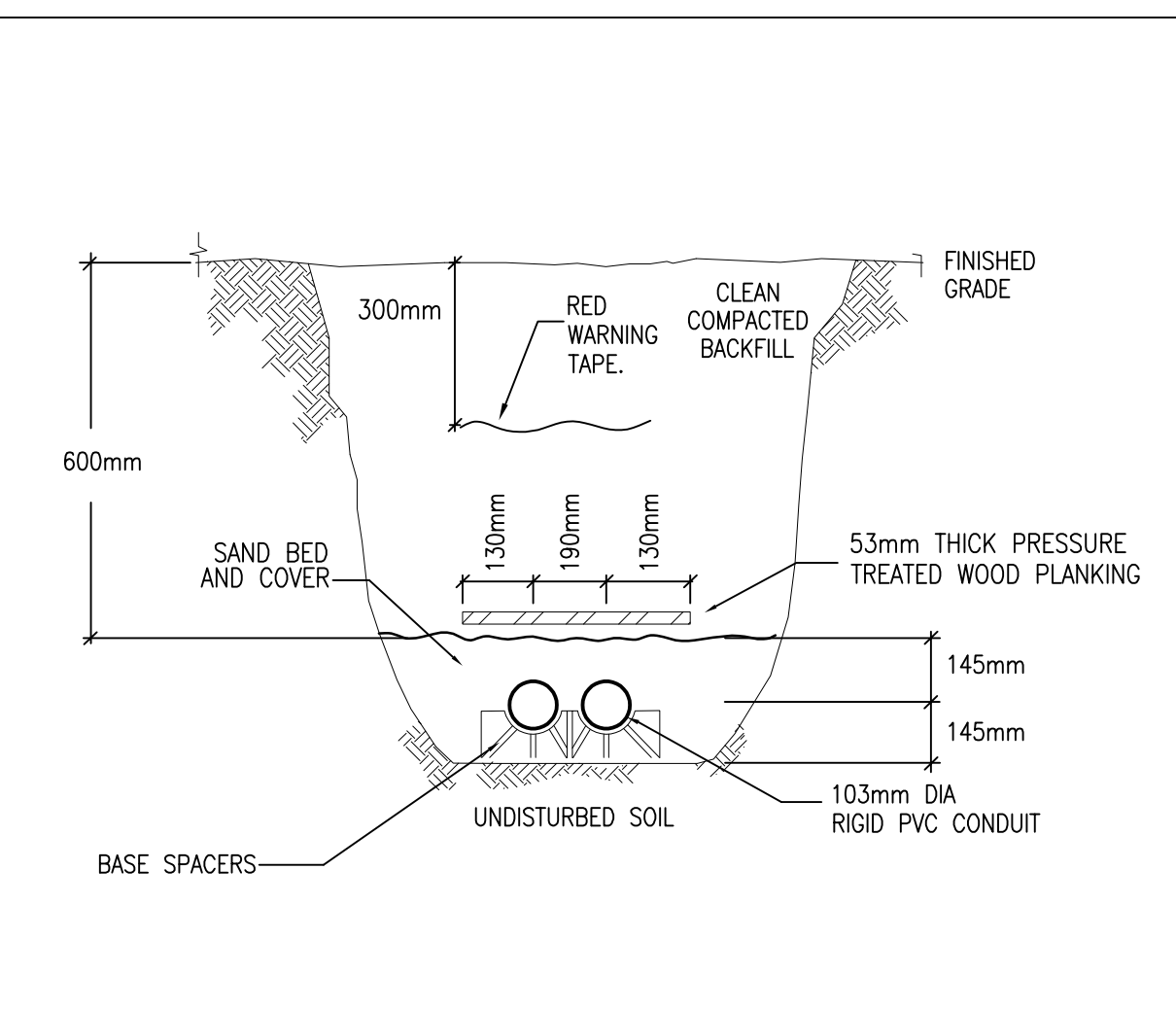
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1 TRENCH DETAIL - PRIMARY 4 CELL  
SP-E02 CONCRETE ENCASED

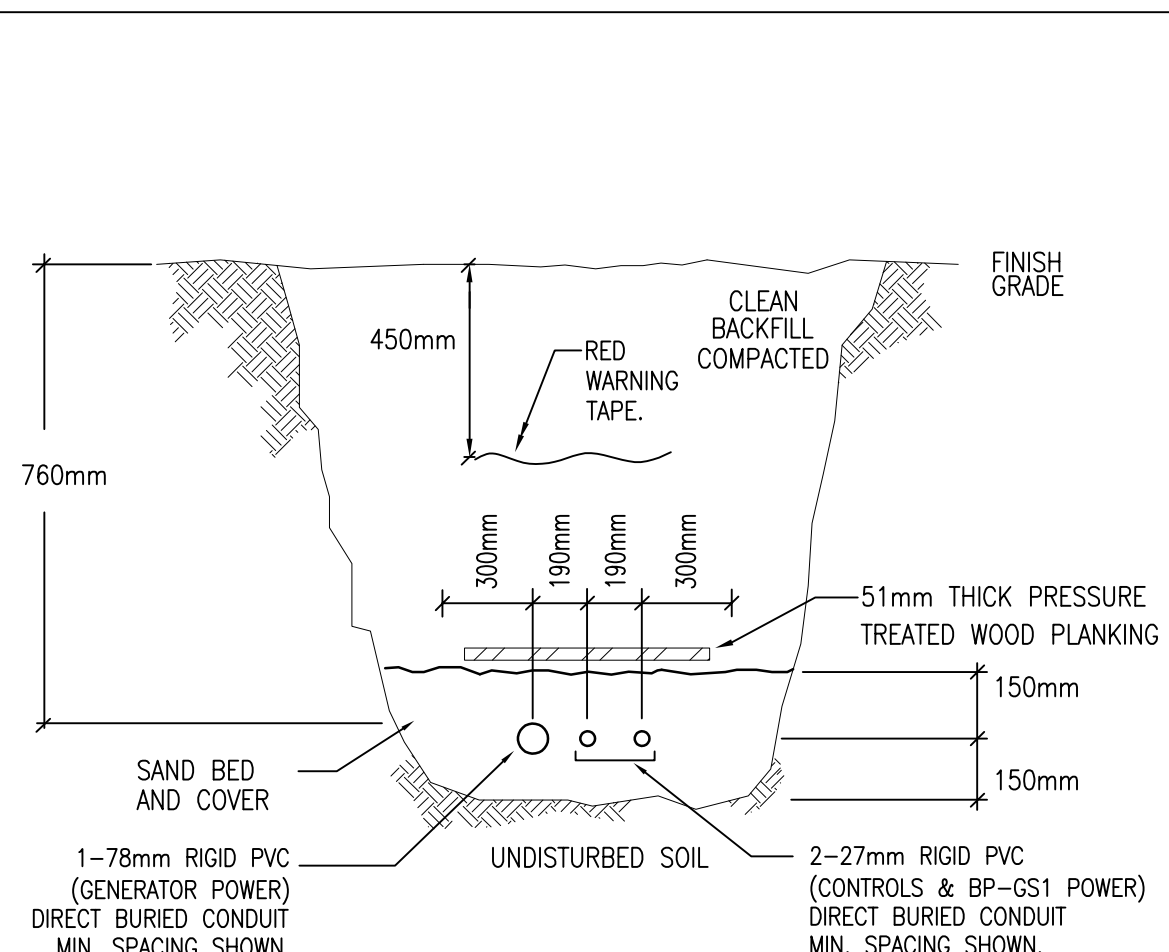


2 TRENCH DETAIL - SECONDARY 6 CELL  
SP-E02 DIRECT BURIED

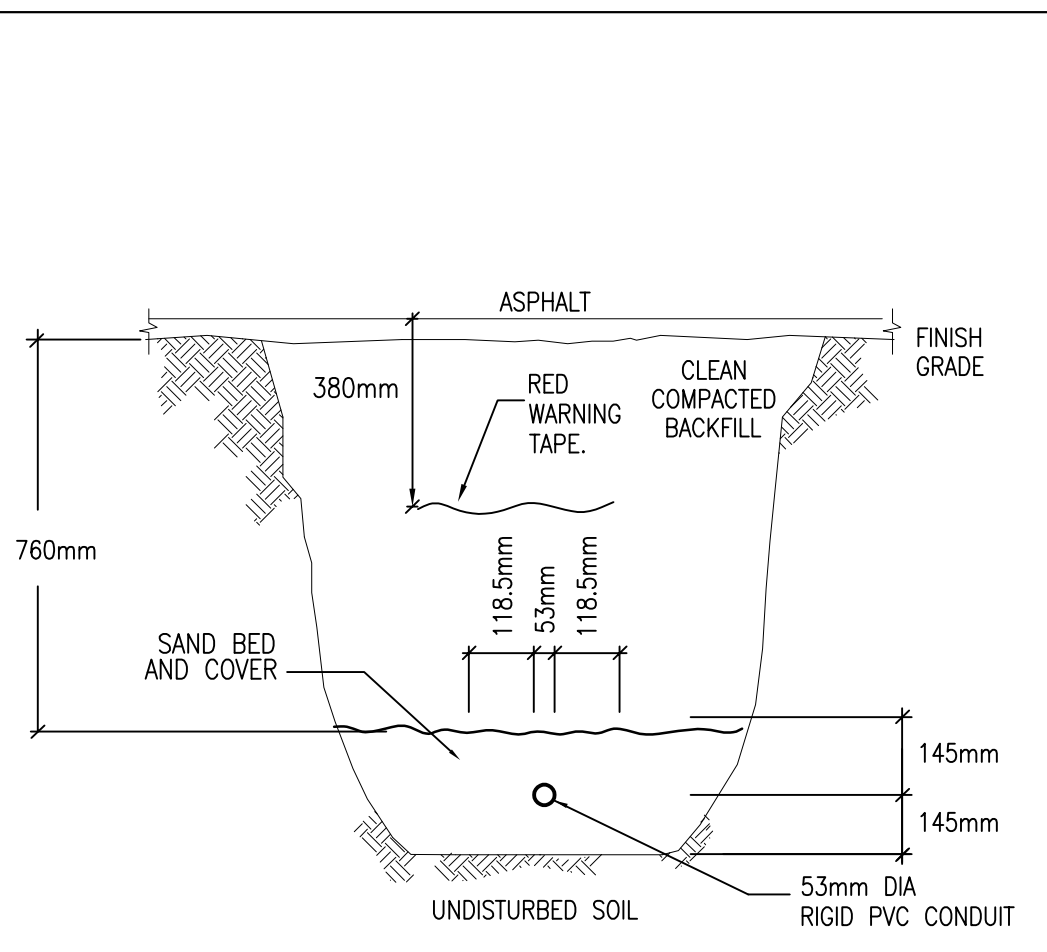


3 TRENCH DETAIL - COMMUNICATION 2 CELL  
SP-E02 DIRECT BURIED

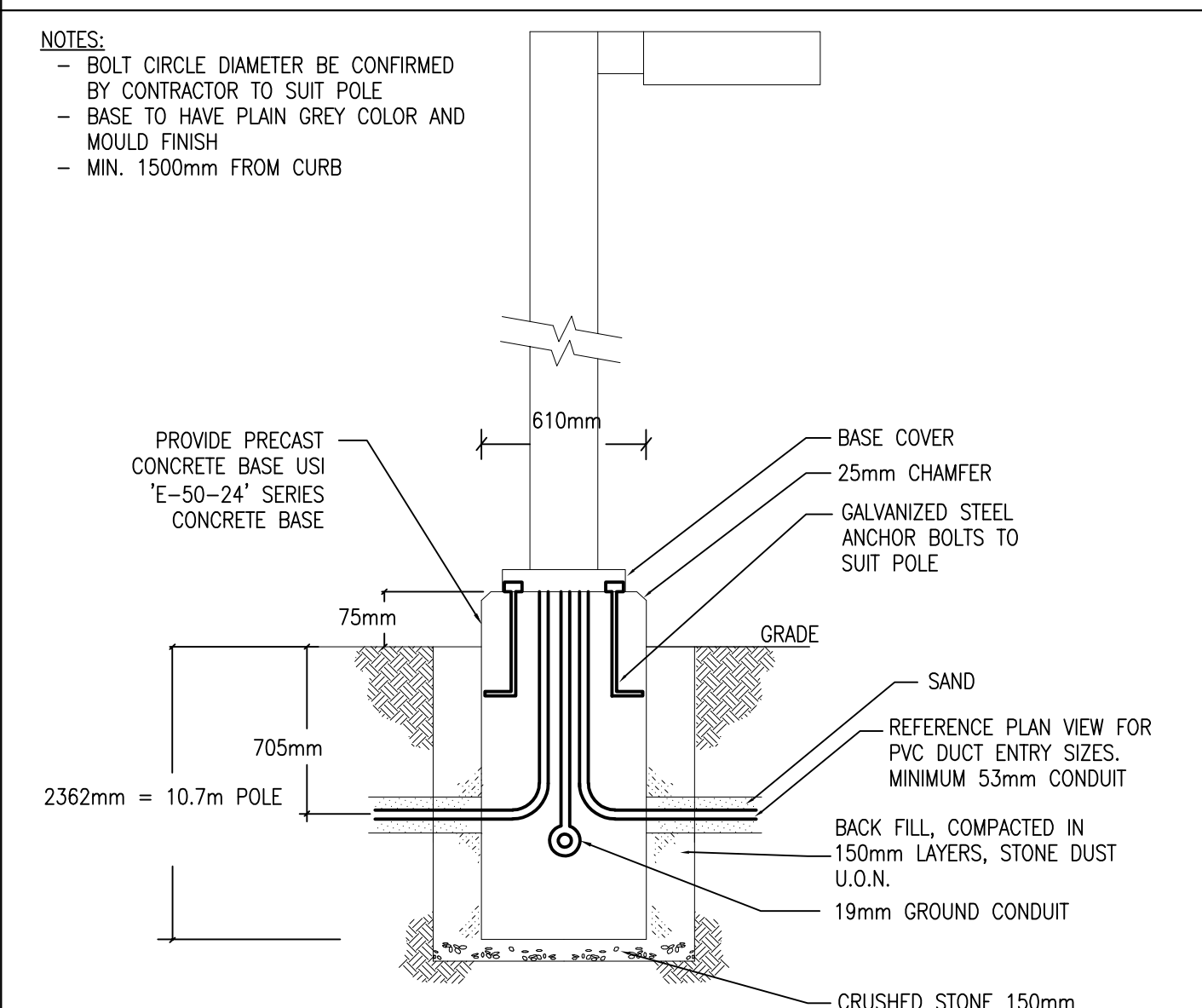
SEPARATE CONDUIT MINIMUM OF 300mm FROM HYDRO AND OTHER TELECOMMUNICATION SERVICES.



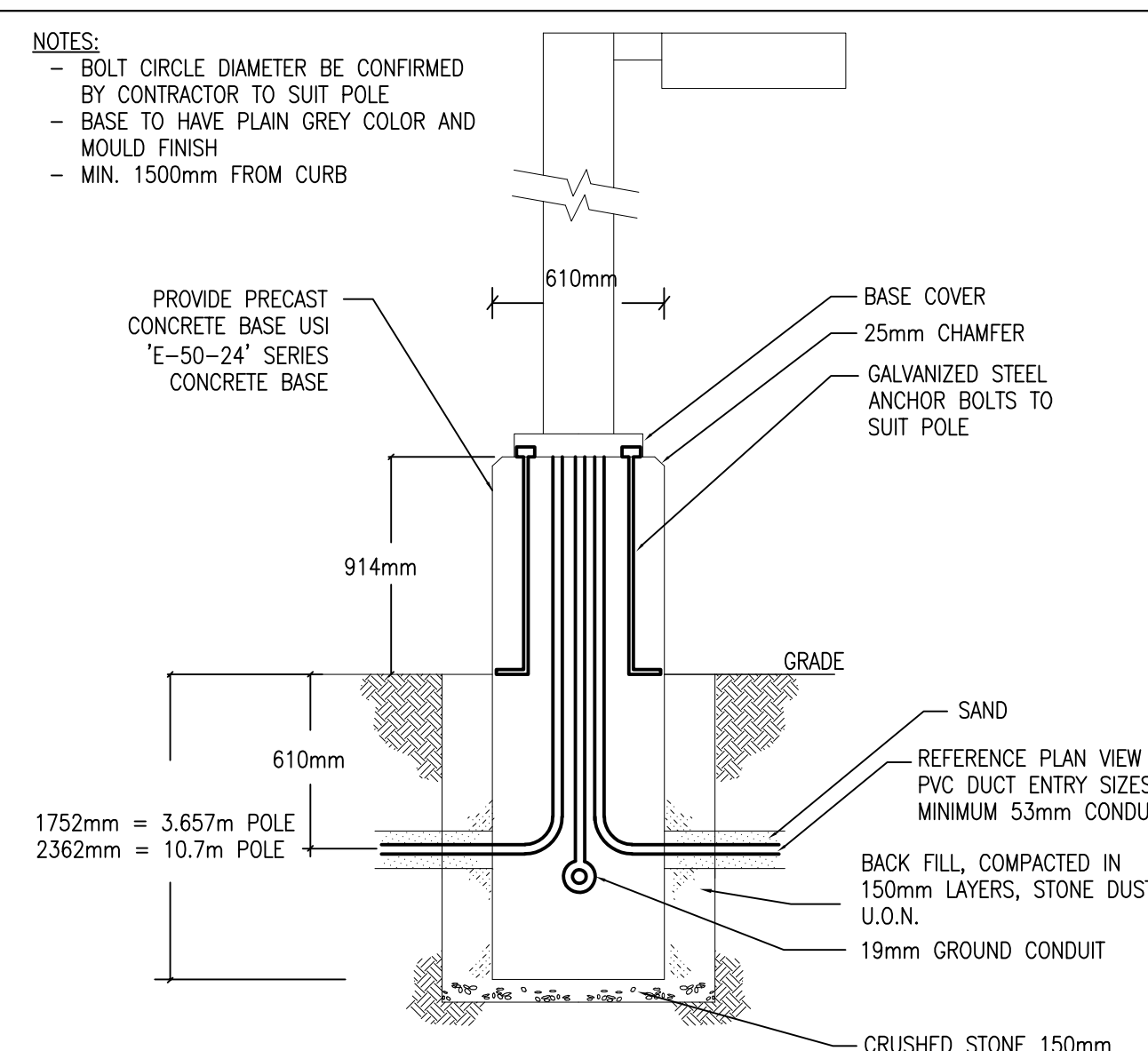
4 GENERATOR TRENCH DETAIL  
SP-E02 DIRECT BURIED



5 DIRECT BURIED CONDUIT FOR EXTERIOR  
SP-E02 LIGHTING STANDARDS OR POWER



6 MOUNTING OF LAMP POST BASE  
SP-E02 CURBED AREAS



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

REVISION No.	DESCRIPTION	DATE
1.	ISSUED FOR SITE PLAN CONTROL	DEC 02/20

**McKEE ENGINEERING**  
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Ottawa, ON K2C 0P9  
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PROJECT:  
MARITIME-ONTARIO  
OTTAWA  
8800 CAMPEAU DRIVE  
OTTAWA, ON  
K2S 1B9

DRAWING:  
ELECTRICAL:  
FIXTURE SCHEDULE & DETAILS

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