

Notification to Australia-Singapore Cable (Singapore) Pte Ltd (the “ASC”) for Earthwork Procedures

1. Introduction

With effect from 1 July 2000, The Info-Communications Media Development Authority (IMDA) has introduced a licensing for telecommunication cable detection workers and in compliance for section 29(1) of Telecommunications Act (Chapter 323), contractor involving in relating to earthworks, is required to comply with the provisions of telecommunication cable detection works under the Act.

The objective is to prevent damages to the underground telecommunication cables which cause disruption to telecommunication services by earthwork contractors.

Under the Act, the below Section applies

- I. Section 29(1) of the Telecommunications Act (the "Act") states that no person shall commence or carry any earthworks within the vicinity of telecommunication cable unless he has:-
 - (a) Given no less than 7 days' written Notice of Commencement of Earthworks to Next Generation Provider Pte Ltd (the “NGP”) as appointed Managed Service Provider on behalf of Licensee, Australia-Singapore Cable (Singapore) Pte Ltd (the “ASC”);
 - (b) Obtained from NGP the necessary information on the location of ASC’s cable in the vicinity of the intended earthworks and consult NGP on protective/preventive measures; and
 - (c) Ensured that cable detection work is carried out by a licensed Telecommunication Cable Detection Worker (TCDW) in order to confirm the location of the cable.
- II. Section 29(3) of the Act states that it shall be the duty of the person who carries out any earthworks referred to in subsection (1):
 - (a) To comply with all reasonable requirements of ASC for the prevention of damage to ASC’s cable;
 - (b) To ensure that reasonable precautions are taken when carrying out such earthworks to prevent any damage to ASC’s cable, including but not limited to site supervision of the earthworks; and
 - (c) To allow NGP/ ASC reasonable access to the work site for the purpose of inspecting or taking any necessary measures to protect ASC’s cables.

All Earthworks Contractors must comply with these requirements.

Any person who fails to comply with these requirements is liable on conviction to a fine not exceeding \$100,000 or to imprisonment for a term not exceeding 3

years or to both.

- III. Section 32 of the Act states that any person who digs, bores, trenches, grades, excavates or breaks any ground with any mechanical equipment or explosive or allows his employee or agent to do so without first ascertaining the exact location of any telecommunication cables is liable on conviction to a fine not exceeding \$100,000 or to imprisonment for a term not exceeding 3 years or to both.
- IV. Section 49(2) of the Act states that any person, who in the course of carrying out earthworks, damages any telecommunication cable is liable on conviction to a fine not exceeding \$1 million or to imprisonment for a term not exceeding 5 years or to both.

Thus, administration procedure for the notification of earthworks by the contractors/ principals when planning and/or working in the vicinity of existing/ planned ASC Network Plans is list herein.

2. Definition

Telecommunication cables include optical fiber cables of 6 fibers to 144 fiber count and above

3. Administration Procedure

- 3.1. The principals/contractors are advised to submit a location map with indicated area of works with Annex A, Request of Plant Maps to following address through email correspondence as to check, and to purchase plant maps if required to ascertain ASC Network's asset

Australia-Singapore Cable (Singapore) Pte Ltd
c/o Next Generation Provider Pte Ltd (NGP)
No.19 Tuas Avenue 3
Singapore 639415
Telephone: +65 68624022 (during office hours)
 :+65 9737533 (after office hours)
Fax: +65 68624024
Email: support@ngp.com.sg

- 3.2. The principals/contractors must engage a Licensed Telecommunication Cable Detection worker (TCDW) to locate ASC's plant routes by appropriate detection equipment before the commencement earthwork and recommendation of digging trial holes to ascertain the services.
- 3.3. The TCDW must submit the detected and located plant route information to the principals/contractors and keep a set of records for future reference.

- 3.4. If the proposed excavation route/zone fall within the plant maps containing ASC's pipes/manholes, the principals/contractors have to notify NGP in compliance with Section 29 (1) of the Act. Payment cheque and necessary documents for processing shall be submitted together with the notice.
- 3.5. Upon receipt of the notification (Annex B), NGP will respond within 7 days, from the date of receipt, with an acknowledgement of the notification or a requirement for a site visit with the principals/contractors for further discussions and consultation and to verify that the contractor has carried out the detection and a conditional approval valid up to 1 month for carrying out trial holes of ASC's plant routes properly and marked the detected/ found ASC's plant routes in the vicinity on site.
- 3.6. Upon site verification with the principal/ contractors of trial holes report on site and compliance of the requirement as stated in the Notice (Annex B), NGP shall issue a letter of recommendation for notices to permit the earthworks to carried out by Principal/ contractor.
- 3.7. For the avoidance of doubt, if the contractor is unable to locate ASC's pipeline(s) and does not inform or seek NGP's assistance to locate the pipe(s), the letter to the notice (Annex B) will not be issued and/ or if letter of notice (Annex B) is issued will be considered void.
- 3.8. Each notification will expire within a month from date of acknowledgement if the intended earthworks are not carried out. Upon expired, a fresh notification is required from the principal/ contractors to notify NGP on the new scheduled commencement date.

4. Submission and Conditions

- 4.1. The notice shall be submitted in standard forms:
 - Annex A – Request for Plant Route Plan
 - Annex B – Notification for Commencement of Earthworks
 - Annex C – Request of Manhole Opening/ Cable detection
- 4.2. The notice shall be submitted via email to: support@ngp.com.sg
- 4.3. Documents necessary for NGP for processing of the notice must accompany the notices e.g. proposed site plan with proposed trial

holes and earthworks position relative to ASC's plant route, work schedule and cable detection drawing by licensed TCDW (if applicable)

- 4.4. Conditions and safety measures, if necessary, will be conveyed in NGP response.
 - 4.5. ASC, c/o NGP reserves the right to include additional conditions and/or modify existing conditions during the duration of earthworks if damage to cable may occur or is likely to occur.
- 5. Method of Payment**
- 5.1. All payment related to notice should be payable to Next Generation Provider Pte Ltd

Australia-Singapore Cable's Networks Plant Location List

S/N	Location	Remarks
1	Tanah Merah Coast Rd	
2	East Coast Park Service Rd	
3	Still Rd South	
4	Still Rd	
5	Jalan Eunos	
6	Eunos Link	
7	Kaki Bukit Ave 1	
8	Kaki Bukit Rd 1	
9	Kaki Bukit Rd 2	
10	Bartley Rd East	
11	Airport Rd	
12	Tai Seng St	
13	Tai Seng Ave	

Note: the above table of location is indicative only; you are to send a request for information (RFI) to NGP for confirmation

"DOS AND DON'TS"

Planning Stage

DOs

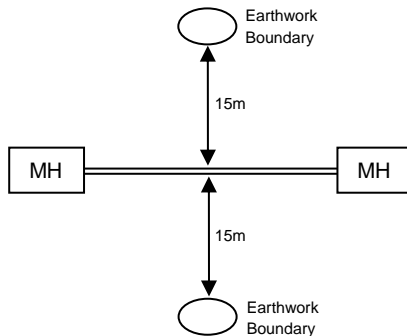
1. All Earthworks Contractors (the "Contractors") are required to contact NGP during planning stage and before commencement of any earthworks for the development project to:
 - 1.1 Obtain ASC's service layout plan and obtain updates of such plan every 12 months thereafter. NGP shall notify the Contractors whether there is any cable within the vicinity of the earthworks, and if so, will provide the requested service layout plans to Contractors within 10 working days from the date of receipt of Contractors' applications for the plans;
 - 1.2 Arrange site meetings for briefing by NGP; and
 - 1.3 Discuss with NGP on whether to divert or provide support to existing ASC's cables, which are affected by the intended earthworks.
2. During the planning stage of the project, the Contractors should take into consideration the time required by ASC/ NGP to carry out cable diversions (if necessary), which may range from 6 to 18 months depending on site situation.

NOTICE OF COMMENCEMENT OF EARTHWORKS PROCEDURES

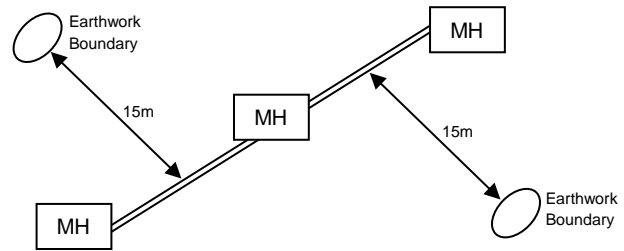
Before commencement of earthworks

3. The Contractors must carry out the following prior to commencing any earthworks (Including excavation, piling, soil investigation etc.):
 - 3.1 Refer to ASC's service layout plan;
 - 3.2 If the position of the earthworks to be carried out is within a distance of 15m of ASC's cable(s), which refers to the perpendicular distance between the linear line of sight of manholes as shown below, submit a Notice of Commencement of Earthworks ("NCE") to the NGP not less than 7 working days prior to the commencement of any earthworks;

E.g. Between 2 manholes



E.g. Between a few manholes



- 3.3 Submit a work schedule to NGP together with their NCE application, regarding the earthworks to be carried out in the vicinity of ASC' cable(s);
- 3.4 Upon receipt of the NCE application, NGP will respond within **7 working days** from the date of receipt, with an acknowledgement of the notification. Upon request by the Contractors, NGP shall have a discussion and consultation at the site with the Contractors on whether there is a need for diversion of ASC's cables. NGP may also initiate site meeting(s) if there are major cables present within the vicinity of the proposed worksite;
- 3.5 Engage a Telecommunication Cable Detection Worker ("TCDW") to carry out telecommunication cable detection, and ensure that the cable detection report provided by the TCDW indicates ASC's actual cable routes, and to verify with NGP if discrepancies are found in their service plans.
- 3.6 Inform NGP if there are discrepancies between the service plans provided by NGP and the actual site conditions. NGP is to update the service plans within a month from the day such discrepancy was brought to NGP's attention and to furnish the updated service plans to the Contractor for their necessary action;
- 3.7 After the TCDW has carried out the detection of ASC's cable routes and had marked out the detected cable routes in the vicinity of the work site, arrange with NGP for a site meeting within **3 working days**.

Site meeting

- 3.8 During the site meeting, NGP will verify whether the Contractors or the TCDW had carried out the detection of ASC's cables routes properly and had marked out the detected cables routes in the vicinity onsite;
- 3.9 When NGP is satisfied that proper detection work has been carried out by the Contractors, in accordance to their requirements, NGP will issue the Conditional Approval to the Contractors within 7 working days upon the site inspection to proceed to dig trial holes as proposed in their NCE submissions;

- 3.10 Do note that each Conditional Approval will expire within 1 month from the date of issue by NGP for the Contractors to proceed to dig trial holes, locate and expose ASC's cable(s). If the digging of trial holes are not carried out or completed within the one (1) month period, the Contractors will have to submit a fresh NCE application or seek extension from NGP on the new schedule of commencement date of the intended earthworks, and after which the Contractors will have to repeat the procedures stated in paragraphs 3.1 to 3.8 above;

Procedures and precautionary measures on digging trial holes

- 3.11 The Contractors must dig trial holes by manual digging to locate and expose ASC's cables within one (1) month from the date of the issuance of the Conditional Approval;
- 3.12 The Contractors must seek NGP's assistance if they are unable to locate the cable(s). NGP will respond within **2 working days** from the date of such request for assistance from the Contractors;
- 3.13 The Contractors must capture the Global Positioning System ("GPS") data X and Y coordinate of the exposed ASC's cables, provide and maintain visible markings (such as poles, tapes, painting and etc.) indicating the actual position of the cables found within the construction site, arrange for onsite trial hole inspection by NGP within **3 working days** after the visible markings are completed;
- 3.14 Once NGP is satisfied after attending the trial hole inspection that all the cables within the vicinity of the worksite have been located and exposed and all necessary cable protection and precautionary measures have been met, NGP will issue the Final NCE Approval to the Contractors to proceed with the earthworks within **7 working days**;
- 3.15 Only with NGP's Final NCE Approval, can the Contractors proceed with the earthworks on the scheduled commencement date;
- 3.16 The Final NCE Approval will not be issued to the Contractors, when:
- a) Contractors did not dig trial holes to expose ASC's cables; or
 - b) Contractors are unable to locate ASC's cables, and did not inform NGP or seek NGP's assistance to locate the cables;
- 3.17 The Contractors must update ASC's cables location information on the developer's construction plans, and disseminate such information to all parties involved in the earthworks at the worksite such as Main Contractor, Sub-Contractors, machine operators, TCDW, etc.;

Procedures and precautionary measures in the event of a cable diversion

- 3.18 After the affected cables have been diverted I recovered by ASC/ NGP, the pipe mouth of abandoned pipes must be sealed and photographs are to be taken by

the Contractors as documentary proof that the necessary checks have been completed by the Contractors. NGP must be present to witness the sealing of the terminated pipe mouth. This is to prevent any accidental installation of new cables into the abandoned pipelines by ASC;

- 3.19 NGP to ensure that all their cables affected by the earthworks are fully accounted for and completely diverted I recovered before issuing the notice of completion of diversion work to the Contractors. Upon completion of the diversion, NGP will notify the Contractors to proceed with the earthworks and provide the Contractors with an updated service layout plan;
- 3.20 The Contractors must inform NGP immediately if the exact location of the cables located is different from the GPS coordinates data provided by NGP in the service layout plan during earthworks. NGP will update the service plan within a month from the date of the information received from the Contractors;
- 3.21 NGP will notify all other Contractors carrying out earthworks at the vicinity where the diverted cables are located and provide such Contractors with the up-to-date service layout plan(s), which contains drawing of the diverted cable(s) routes;
- 3.22 The NCE shall be submitted on a standard form (Annex B) as prescribed by NGP, and shall be submitted by hand, registered post, LUM services or other courier services to:
- Australia-Singapore Cable (Singapore) Pte Ltd
c/o Next Generation Provider Pte Ltd (NGP)
No.19 Tuas Avenue 3
Singapore 639415
Telephone: +65 68624022 (during office hours)
 :+65 9737533 (after office hours)
Fax: +65 68624024
Email: support@ngp.com.sg
- 3.23 Where there is time lapse in construction work of **12 months** from the date of application of the NCE, the Contractors have to repeat the procedures stated in paragraphs 3.1 to 3.22

MEASURES TO PREVENT DAMAGE TO TELECOMMUNICATION CABLES

4. The Contractors must submit to NGP for approval the method of support and protection provided to those exposed ASC's cables, should there be a need for ASC's cables to be supported and/or protected during the construction work at site.
5. The Contractors must conduct regular inspection and maintenance of such support and protection structure to ASC cable(s) to ensure that the support is of sound working

condition.

6. The Contractors must provide accessibility at all times to NGP's personnel and vehicles to access ASC's cables that are supported during the construction stage for the NGP's inspection and maintenance purpose.
7. After all earthworks are done, the Contractors must inform NGP before any dismantling of supports or perform backfilling over ASC's cables. The Contractors must take photographs to document the whole process during the dismantling and backfilling.
8. When the tree is obstructing the development of the project at the site and there is ASC's cable within the vicinity of the site, the Contractors must sever the tree roots before grubbing the tree stump after getting the approval from the relevant authority.
9. The Contractors must take note that the depth of ASC's telecommunication cables may vary due to the site conditions and it can go very deep to cross under a drain or canal.
10. The Contractors must report to NGP immediately on any damage to the cables at the following telephone nos. as early reporting of such incident could reduce the severity of the damage and allow for faster service recovery by ASC/ NGP. The numbers are **68624022** during office hours and **97537533** after office hours.
11. The Contractors must regularly monitor and where necessary, provide appropriate and adequate soil control measures such as shoring and shuttering to prevent soil movement which can cause ASC's cables damage in the excavated area.
12. The Contractors must provide ASC's service layout plan, NCE and cable detection drawings (if any) at site as documentation proof when requested to do so by NGP or the respective Authority.
13. If the cable route indicated on ASC's service layout plans cannot be detected, do not assume that there is no presence of the cables. There could be a possibility that only presence of fibre cables without copper elements or metallic tracer in the cable(s) route where cable detection is not possible. Contractors have a responsibility to dig trial hole(s) to locate the cable(s) route. In the event that the location of ASC's cable(s) could not be located within the trial hole(s), the Contractors must seek assistance from NGP to locate the cables. The Contractors shall bear the costs incurred for works rendered, i.e. the cost for the works to be carried out by ASC's contractors to locate the optical fibre cables such as opening of manhole, pumping out water from manhole, pulling copper wires into the pipes, to pump signals into the copper wires so that the TCDW can proceed to detect the cables. Thus, the Contractors will need to bear the cost of such work done by NGP or its contractor. Contractors will be informed in advance all the related applicable charges (see Annex C)

14. For further enquiry, please contact below

Australia-Singapore Cable (Singapore) Pte Ltd
c/o Next Generation Provider Pte Ltd (NGP)
No.19 Tuas Avenue 3
Singapore 639415
Telephone: +65 68624022 (during office hours)
 :+65 9737533 (after office hours)
Fax: +65 68624024
Email: support@ngp.com.sg

DON'Ts

1. The Contractors must not dig trial hole(s) with any excavator or any other mechanical means. The Contractors must also not use hand auger to bore trial holes as sharp pointed edges of the hand auger could penetrate the pipes and may damage the cable(s).
2. The Contractors must not carry out any excavation, soil investigation, piling or earthworks with any mechanical means in the vicinity of ASC's cables without confirming the actual positions of the cable(s).
3. The Contractors must not dig trial hole(s) seeking to confirm the absence of ASC's cables at the location where the Contractors intend to carry out earthworks. The Contractors must engage TCDW to detect the cables' location, and also dig trial hole(s) to positively ascertain the exact location of the cables prior to the commencement of any earthworks. In the event the Contractors are unable to locate the cables, the Contractors must seek NGP's assistance to locate the cables.
4. The Contractors **must not open, remove or cover up** any ASC's manhole, equipment box or pedestal box with earth or building materials, without NGP's prior approval.
5. The Contractors must not fence up any ASC's manhole, equipment box or pedestal box inside the work area.
6. When the tree is obstructing the development of the project at the site and there is ASC cable within the vicinity of the site, the Contractors must not grub up tree stumps without first severing the roots.
7. The Contractors must not assume that ASC's cables are in a straight run.
8. The Contractors must not cover up cable damages. Instead, they must report any cable damages to the relevant ASC(s) immediately via telephone no. **68624022** during office hours and **97537533** after office hours.

9. The Contractors must not dismantle any support or do backfill on ASC's plant without first informing NGP.
10. The Contractors must not remove or damage any ASC's plant, including any concrete encasing the telecommunication cables, without prior approval from the Licensee.
11. The Contractors must not assume that the depths of ASC's cables are not deeper than 1.5m.
12. The Contractors must not remove any warning slab and/ or concrete encasement around ASC's pipelines after exposing them, without prior approval from NGP.

Annex A Request for Plant maps

Australia-Singapore Cable (Singapore) Pte Ltd

c/o Next Generation Provider Pte Ltd
No.19 Tuas Avenue 3
Singapore 639415

Telephone: 68624022

Email: support@ngp.com.sg

Project Title: _____

(Please attach a clear location plan with the area of interest demarcated & a plan from the local street directory)

Principal Company: _____

Contact Person's Name: _____

Tel / HP No: _____

Email: _____

Requesting Company: _____

Company Address: _____

Tel / HP No: _____

Email: _____

We confirm that the above information is correct and accurate. While Next Generation Provider will endeavor to provide updated copies of plant map, we understand Next Generation Provider reserves the right to make any amendments to the maps without prior notice and that the purchase of the map(s) does not in any way affect our obligations under IMDA Act or any other relevant legislation or regulations.

* Cost of Plant Map – S\$10.70 (including prevailing GST) per A3 size drawing.

Name: _____

Signature/ Date: _____

Company's Stamp: _____

Annex B Notice of Commencement of Earthworks within the Vicinity of ASC's Telecommunication Cables

c/o Next Generation Provider Pte Ltd
No.19 Tuas Avenue 3
Singapore 639415

Telephone: 68624022

Email: support@ngp.com.sg

For Internal Use Only		
Case Ref No	Date Received	Remark
Contractor's Particular:		
(Name in Full)	NRIC/ Fin No	
Designation:	Tel No:	
Mobile No:	Email:	
Company Name		
ROC Registration No		
Company Address		
		S()
2. Site Supervisor's Particular		
(Name in Full)	NRIC/ Fin No	
Mobile No:	Email:	
3. Contract's Detail		
Principal:		
Project Officer:		
Tel No:	Mobile No.	
Contract Period:		
Contract No:	Work Order No	
(to indicate if applicable)		
TCDW's Particular		
(Name in Full)	NRIC/ Fin No	
Mobile No	Tel No	
License No		
Work Details		
Proposed Earthwork's Location (indicate nearest street address and landmark)		
Duration from:		
Nature of earthworks:		
<input type="checkbox"/>	Open Trench Excavation	
<input type="checkbox"/>	Sinking of earth rod, casing of tubes	
<input type="checkbox"/>	Boring, Dredging, Jacking, leveling, Piling or Tunneling	
<input type="checkbox"/>	Soil Investigation	
<input type="checkbox"/>	Others (Please specify)	
Pipe Affected:		(No of ways – identified)
Cable Affected		Identified by TCDW

Manhole Affected: _____ (identified by TCDW) _____ Distance of work area boundary from cable plant: _____ m Depth of earthworks: _____ m Actual Commencement of Date (DD/MM/YY): _____ Estimated Completion Date (DD/MM/YY): _____																					
Declaration a. Plant route plan have been obtained from c/o Next Generation Provider b. Cable detection was conducted at site by above declared and appointed TCDW c. Cable Locations/ routes were marked out at site by TCDW/ contractor d. My staff and myself have been briefed by TCDW on prevention measures of cable damages e. I have brief the supervisor (s), workers and excavator operation (s) on precaution and preventive measures to be taken to prevent cable damages f. All earthworks to be stop when telecommunication cables are damaged and Next Generation Provider to be notified immediately I hereby declare that I know and understand my duties under provisions of the Telecommunication Act and the information given in this notice and any attached documents is true, correct and complete. During the duration of the earthworks, I shall make myself readily contactable at the mobile number given in this notice.																					
_____ Name and Job title	_____ Date / contractor's signature/ company stamp																				
Fees 1. A fee of \$128.40 (every 1.5km) will be charged for each Notice For Commencement of Earthworks processed by Next Generation Provider. The fees includes consultation call-out services and inspection of trial holes upon call from Requestor within 3 days 2. Payment is to be made by Company cheque. This is the only acceptable method of payment. 3. Payment to be payable to Next Generation Provider Pte Ltd																					
For Internal Uses Only <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Name/ Signature of Officer</td> <td style="width: 20%; border-bottom: 1px solid black;">_____</td> <td style="width: 20%;">Date</td> <td style="width: 20%; border-bottom: 1px solid black;">_____</td> </tr> <tr> <td>Plant Affected</td> <td colspan="3">Duct/ Manhole/ Fiber Cables</td> </tr> <tr> <td>Diversion Required?</td> <td colspan="3">*Yes/ No</td> </tr> <tr> <td>NGP site supervision required?</td> <td colspan="3">*Yes/ No</td> </tr> <tr> <td>Site Consultation?</td> <td colspan="3">*Yes/ No</td> </tr> </table> <p>Please attach the following records together with your notice Cable Detection Drawing (From your TCDW) (where applicable) A sketch showing your proposed site plan The work schedule of your project Work Methodology Statement</p>		Name/ Signature of Officer	_____	Date	_____	Plant Affected	Duct/ Manhole/ Fiber Cables			Diversion Required?	*Yes/ No			NGP site supervision required?	*Yes/ No			Site Consultation?	*Yes/ No		
Name/ Signature of Officer	_____	Date	_____																		
Plant Affected	Duct/ Manhole/ Fiber Cables																				
Diversion Required?	*Yes/ No																				
NGP site supervision required?	*Yes/ No																				
Site Consultation?	*Yes/ No																				

Annex C Request for manhole opening/ cable detection

c/o Next Generation Provider Pte Ltd
No.19 Tuas Avenue 3
Singapore 639415

Telephone: 68624022

Email: support@ngp.com.sg

For Internal Use Only					
Case Ref No		Date Received		Remark	
A. To be completed by Requesting Company:-					
Project Title: _____					
Type of Earthworks: _____					
Access Manhole Number: _____					
Proposed Date of Detection Commencement: _____					
Requesting Company Name: _____					
Address: _____					
Tel No: _____ Fax No: _____					
Service Required (Please tick accordingly): <input type="checkbox"/> Open Manhole only <input type="checkbox"/> Assist in Cable Detection					
Name: _____ Signature/ Date _____					
Contact Number: _____ (Handphone) _____ (Office) _____					
B. To be completed by Next Generation Provider (NGP) :-					
REFERENCE No: _____					
Payment By * Cheque / Cash Authorized Officer's Name / Signature _____ Date _____					

Note:

- Please be informed that the contractor/TCDW will be responsible for road signing, pumping of water in the manhole, getting qualified staff to access manhole and all necessary checks (gas detection) before accessing to manhole to perform cable detection.
- You are not to access into Australia Singapore Cable's manhole without our supervision.
- Our charges for opening manhole only are \$64.20 for half day and \$128.40 for full day. The charges for full assist on detecting cable are \$1025.06 per section. These charges include manhole opening, IUG team to assist, transportation, confined space assessor and admin charge.
- All charges above are inclusive of prevailing GST.
- Please prepare a cheque made payable to "Next Generation Provider Pte Ltd"