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General Introduction 概述







| Company Profile |

U-Tech is a wholly-owned subsidiary of The Hong Kong and China Gas Company Limited (also known as Towngas). Building upon more than 150 years of Towngas experience and expertise in the utilities industry, we are here to offer you the best of services.

| Our Range of Full Services |

We provide total solutions for our customers. We possess the expertise, resources and advanced equipment to undertake projects such as rehabilitating old pipes, installing underground pipes, ducts and cables, construction and maintenance of water works, road and drainage works and LPG stations, as well as developing service systems in buildings for gas, plumbing and drainage, electricity, telecommunication, air conditioning and fire services installations, all utilising the latest technologies.

For architects and builders, we can provide a one-stop-shop service for installation of both underground and aboveground utilities including building services.

| Company Mission |

Our misson is to provide customers with efficient, competent and friendly services, while working to preserve, protect and improve our environment.

公司簡介

卓裕是香港中華煤氣有限公司(以下簡稱煤氣公司)的全資附屬公司。憑著煤氣公司超過一百五十年在公用事業建設上的經驗和專業知識,我們竭誠為客戶提供優質服務。

全面服務

我們致力為客戶提供全面的服務。我們擁有專業的人材,資源和先進設備,利用最新的科技進行各項安裝和維修工程,包括:修復舊管;鋪設新管道、電纜及套管等地下網絡工程;建造和維修水務設施;道路及渠務工程;石油氣加氣站以及有關氣體、給排水、電力、空調、消防和通訊等屋宇設施的工程。

我們可以為建築師和建造商提供地下及樓宇的公用設施和屋宇設備的一站式服務。

| 公司使命 |

卓裕致力提供快捷、專業及親切的服務,同時保護及改善環境。



Business Scope 業務範圍



1. Civil Engineering

Waterworks, roads & drainage works

| Civil Engineering Contractor |

U-Tech is on the List of Approved Contractors for Public Works in the "Waterworks" and "Roads & Drainage" categories.

Riding on Towngas' 150-plus years of underground utility experience and U-Tech's pioneering of polyethylene (PE) pipe laying and trenchless techniques in Hong Kong, we possess extensive expertise in laying water pipes of different materials. With a strong engineering team, U-Tech is also able to provide quality service in conventional and trenchless technology to Civil and E&M Projects.

1.土木工程

水務、道路和渠務工程

土木工程承建商

卓裕是香港政府認可的水務工程和道路及渠務工程的承建商

我們憑藉煤氣公司超過一百五十年鋪設地下管網設施的經驗,並 且於香港率先採用聚乙烯管及非開挖技術,對於不同物料的水管 業服務。在強大的工程團隊支援下,我們可利用傳統和非開挖方 法進行土木及電機工程,為客戶提供優質服務



An Expert in Polyethylene (PE) Pipe

By the end of 2017, over 400km of PE pipes have been laid by U-Tech.

The Benefits of PE

- No corrosion
- No leakage due to use of homogeneous fusion joints
- Flexible with ability to cope with substantial settlement
- Light weight
- Durable (min. 50-year design life)

A Multi-Utilities Contractor for Underground Services

U-Tech has a wealth of competence and experience in laying all kinds of underground utilities including drainage pipes, water pipes, gas pipes, cable ducts, telecommunication ducts,

We provide a one-stop-shop service to architects and builders. This facility not only improves the efficiency of project management but also ensures smoother delivery, offering substantial cost savings to clients.

| Common Trench Approach |

A multi-utilities concept enables a common trench approach for underground installation, creating efficiencies in terms of investment and time for completion.

鋪設聚乙烯管的專家

直至2017年底,卓裕已鋪設超過400公里聚乙烯管

| 聚乙烯管的好處 |

- 不會腐蝕
- 採用熔合焊接,無須擔心接口滲漏
- 柔韌度高,即使遇上嚴重地陷也不易破損
- 耐用(最少可使用五十年)

綜合地下管線承造商

線:包括水管、燃氣管、排水管、電線和電訊套管等。我們有能 力為建築師和建造商提供鋪設地下公用設施的一站式服務,不但 可提高項目管理效率,也可確保工程能順暢地進行,從而使工程 造價大幅減低

在綜合地下管線的概念下,我們利用共用坑道鋪設各種地下 管線,從而減低工程費用及時間



2. Trenchless Works

A Trenchless Expert

U-Tech possesses a wide range of facilities and expertise to install underground services using trenchless technology. Typical techniques employed include Compact Pipe, horizontal directional drilling (HDD), pipe ramming, Swagelining and pipe bursting, etc.

| Compact Pipe |

Compact Pipe is a trenchless technique to rehabilitate gas pipes, water pipes or sewers using factory hot folded U-shaped PE pipe as liner. Folded PE liner, in coiled pipe form on a drum, is brought to the site and towed into the old pipe, and then reverted by pressurised steam to its original shape to form a close-fit lining onto the old pipe. The beauty of Compact Pipe includes no fusion joints and its ability to negotiate more bends. U-Tech as a licensed contractor of the technique in Hong Kong has been using it to help Towngas, WSD and EMSD and many other clients to rehabilitate their old pipes successfully.

| Horizontal Directional Drilling (HDD) |

HDD is a steerable drill and pull method. Our facilities enable pipe up to several hundred metres in length and up to 600mm in diameter to be installed in a trenchless way.

2.非開挖工程

| 非開挖技術專家

卓裕擁有各種先進設備及專業技術,能為客戶在無需挖掘的情況下鋪設地下管線。我們一般採用的技術包括U形聚乙烯折疊管、水平定向鑽孔、氣動頂管、鍛模套管及破管修復法等。

U形聚乙烯折疊管技術

U形聚乙烯折疊管技術是一種用於修復煤氣管、水管及排水管的非開挖技術。U形聚乙烯折疊管在生產廠房利用高溫預製,然後盤於大型滾筒上,再運送到工地套入舊管內,最後利用加壓蒸氣使聚乙烯管膨脹復原,成為緊貼舊管的內襯管。聚乙烯折疊管的優點是沒有接口及能修復較多彎的管道。卓裕是在香港取得U形聚乙烯折疊管技術牌照的承建商,過往利用此技術為煤氣公司、水務署、機電工程署及其他客戶修復了不少舊管道。

水平定向鑽孔

利用水平定向鑽孔技術沿著可變換的路線鑽孔然後回拖管道,從 而在無需挖掘的情況下安裝長距離的地下管線。我們採用的設備 可鋪設管徑達六百毫米的管道,長度可達數百米。



| Pipe Ramming |

Pipe Ramming is another fast and cost-effective trenchless method for pipe installation. Using this method, a casing pipe, usually made of steel is driven underground to the designed depth from a drive pit to an exit pit using a pneumatic hammer mole. After the casing pipe is installed, the soil inside can be removed by an auger drill, high pressure water jet etc, to allow a duct for subsequent installation of the carrier pipes or cables.

| Swagelining |

U-Tech is the licensed contractor in Hong Kong for the highly effective Swagelining process developed by the British Gas Industry. In the past decade, a lot of Towngas' old pipes have been rehabilitated by Swagelining. Given the highly congested underground environment in Hong Kong, finding space to install a new pipeline to replace an old one is extremely difficult. Swagelining resolves this problem and has the added benefit of reducing cost. This technique can be applied to all sorts of underground pipelines. Through a special swaging die, a polyethylene pipe is squeezed to a smaller diameter and towed through the host pipe and afterwards, it will recover to its original shape tightly fitted to the internal surface of the host pipe. The technique is commonly applied to rehabilitate gas, water and drainage pipes.

| Underground Services Detection |

U-Tech provides service to locate existing underground utilities for pre-excavation or pre-boring planning.

We employ a wide range of facilities including electromagnetic pipe and cable locators and ground-penetrating radars to map the depth and location of the utilities and other buried targets.

|鍛模套管技術

卓裕乃在香港獲取鍛模套管技術牌照的承建商,此技術是英國燃氣工業的科研成果。過去十年,煤氣公司不少舊管道也採用此技術修復。香港地下管道縱橫密集,要鋪設新管道以取代舊有管道極之困難。鍛模套管技術正可解決這問題,更可減低工程費用。這項技術可用於修復各種不同的地下管道。

我們利用特製的鍛模, 首先將聚乙烯管擠壓使管徑縮小, 以方便 套入原有舊管, 然後使聚乙烯管回復至原有大小, 緊貼於舊管的 內壁。此技術現已普遍應用於修復煤氣管、水管及排水管。

氣動頂管

氣動頂管乃另一種快捷及高效益的非開挖技術,首先利用夯管錘和頂管配件,將套管(通常為鋼管)從一端頂至另一端。頂管完成後,再使用高壓水,螺旋鑽等方法將管套內泥土清除。泥土除去後,便可在套管內安裝所需的新管線。

地下設施探測

卓裕可以為客戶在開挖或探孔前提供地下設施探測服務,以確定 現有設施的位置。我們應用多種先進的設備,包括電磁波管道及 電纜探測器、探測雷達等,可探測到地下設施的深度及位置。

3. Building Services

| Building Services |

U-Tech has a team of highly professional engineers and qualified technicians who have undergone vigorous training and can offer clients tremendous experience to meet their needs in all utility areas.

- Plumbing and drainage systems
- Fire services installations
- Electrical installations
- MVAC installations

Integrated Services for Above and Below Ground

With capabilities in both aboveground and underground services installation, U-Tech provides a one-stop service to architects and builders.

3.屋宇設施

屋宇設施

卓裕的專業工程師及合資格技術員均接受嚴格訓練,並擁有豐富 的工程經驗,為客戶提供多方面的服務。

• 給排水系統

綜合地下設施和屋宇設施服務

卓裕擁有地下設施及屋宇設施安裝工程的專業技術,可以為建築 師和建造商提供快捷方便的一站式服務





| Gas Services |

LPG, Towngas

U-Tech is a Registered Gas Contractor approved by the EMSD.

Our technicians are experienced Registered Gas Installers qualified to carry out all kinds of gas system installation and maintenance.

4. 氣體設施

石油氣、煤氣

卓裕是香港政府機電工程署認可的註冊氣體工程承辦商,我們的 工程。





Project Reference 參與工程項目





Reprovision of Waterworks & **Relocation of Chlorination House** - Route 8

Client: Highways Department Completion Date: December 2003 **Description of Works:**

- Construction of retaining wall and site formation
- Construction of new chlorination house
- Construction of new remote pump room
- Laying of new water pipes, process pipes and cables

八號幹線 -重新建造大埔道濾水廠的氯氣房

客戶:路政署

完成日期:2003年12月

工程描述:

- 地盤平整及擋土牆建造
- 建造氯氣房
- 建造抽水站
- 相關的水務及渠務工程

Reprovision of North Point Reservoir and Pumping Station - 3/WSD/03

Client: Water Supplies Department Completion Date: May 2006 **Description of Works:**

- Demolition of existing pumping station
- Demolition of existing service reservoir
- Removal and storage of existing GRP tank
- · Construction of new pumping station
- · Construction of new service reservoir
- Construction of geotechnical works
- · Laying of new water mains, drainages and utilities

北角海水配水庫重建工程及北角高地 海水抽水站遷移工程 - 3/WSD/03

客戶:水務署

完成日期: 2006年5月

工程描述:

• 清坼現有泵房

• 清坼現有配水庫

• 清坼現有玻璃纖維儲水箱

• 建造海水抽水站

• 建造海水配水庫

• 相關的水管鋪設、排水及斜坡工程



Greening Works in Hung Hom Waterfront Promenade – CV/2009/15

Client: Civil Engineering and Development Department / Grand View (Civil) Ltd.

Completion Date: July 2011 Description of Works:

- Greening works
- Construction of paved area
- · Provision of railings, rain shelter, depot and ancillary works
- Provision of lighting and E&M works

紅磡海濱長廊綠化工程 - CV/2009/15

客戶:土木工程拓展署/浩程(土木)有限公司

完成日期:2011年7月

工程描述:

- 綠化工程
- 建造緩跑徑及海濱行人道
- 建造避雨亭、欄杆及相關設施
- 建造照明及相關設施







Client: Civil Engineering and Development Department / Grand View (Civil) Ltd.

Completion Date: November 2013

Description of Works:

 Construction of public toilet, cycle rental kiosks, first aid kiosks, pavilion, cycle parking areas, practicing areas, sitting out areas and associated works at the Hubs in Sheung Shui and Sha Tin

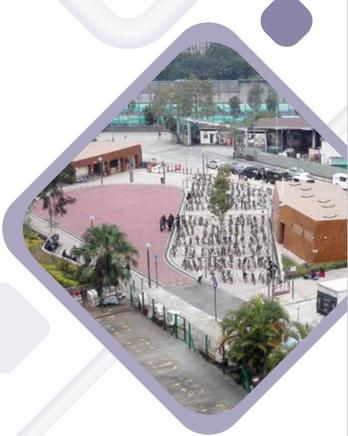
新界單車徑網絡 -上水及沙田的匯合中心 - TP/2011/01

客戶: 土木工程拓展署/浩程(土木)有限公司

完成日期:2013年11月

工程描述:

• 興建位於上水及沙田的匯合中心,包括公共廁所、單車租賃處、急救站、涼亭、單車停泊區、單車練習區、休閒區及進行相關的附屬工程







Sewerage Upgrading Works in Tai Lam Centre for Women and Other DSD Facilities and Village Sewerage in Sha Tau Kok – DC/2011/03

Client: Drainage Services Department Completion Date: November 2014 Description of Works:

- Construction of sewage treatment facilities in Tai Lam Centre for Women
- Laying of sludge pipe and construction of minor civil works in Shek Wu Hui Sewage Treatment Works
- Construction of minor civil works in Sha Tin Sewage Treatment Works
- Construction of minor civil works in Siu Hong Sewage Pumping Station
- Construction of village sewerage in Leng Tsai village, Tai Tong Wu village and Sha Tau Kok Chuen

大欖女懲教所及其他渠務署設施的污水 系統改善工程暨鋪設位於沙頭角的鄉村 污水收集系統 - DC/2011/03

客戶:渠務署

完成日期:2014年11月

工程描述:

- 大欖女子監獄內建造污水處理設施
- 石湖墟污水處理廠內鋪設污泥管道及建造小型土木工程
- 沙田污水處理廠內建造小型土木工程
- 兆康污水泵房內建造小型土木工程
- 嶺仔村、大棠湖村及沙頭角村建造鄉村污水收集系統

Pedestrian Link between Tsing Yi North Bridge and Tsing Yi Station and Provision of Coach Lay-by at Moving Memorial to War Martyrs, Tai Mong Tsai Road, Sai Kung – HY/2013/14

Client: Highways Department Completion Date: October 2016 Description of Works:

- Pedestrian Link between Tsing Yi North Bridge and Tsing Yi Station – construction of an elevated ramp about 40m long connecting Tsing Yi North Bridge and Tsing Yi Station
- Provision of Coach Lay-by at Moving Memorial to War Martyrs, Tai Mong Tsai Road, Sai Kung

青衣北橋與青衣站之間的行人連接路和西貢大網仔路烈士碑園加建旅遊巴停泊處 - HY/2013/14

客戶:路政署

完成日期:2016年10月

工程描述:

- 青衣北橋與青衣站之間的行人連接路-興建一條長約四十米、 連接青衣北橋與青衣站的架空斜路
- 西貢大網仔路烈士碑園加建旅遊巴停泊處







Provision of Lift and Staircase to Existing Footbridge Linking Chung Fu LRT Station and Tin Wah Estate Ancillary Facilities Block, Tin Shui Wai – HY/2014/03

Client: Highways Department Completion Date: January 2017 Description of Works:

 Provision of one lift (capacity: 12 persons) and the associated civil works

 Provision of a covered staircase about 19m long with internal width of about 2m

頌富輕鐵站至天水圍天華邨服務設施大樓的接駁行人天橋加建升降機及樓梯 - HY/2014/03

客戶:路政署

完成日期:2017年1月

工程描述:

• 加建一部升降機(容納十二人)以及相關土木工程

•加建一段約19米長和2米闊(內計)的有蓋樓梯

Water Supply to Pak Shek Kok Reclamation Area, Tai Po – Stage 2 Phase 2 – 9/WSD/13

Client: Water Supplies Department Completion Date: March 2017 Description of Works:

 Laying of about 2.1km of fresh water mains of 600mm in diameter between Pun Chun Yuen and Shan Tong New Village in Tai Po

• Construction of 100m long pipejacking under Tai Po River

大埔白石角填海區供水計劃 -第2階段第2期 - 9/WSD/13

客戶:水務署

完成日期: 2017年3月

工程描述:

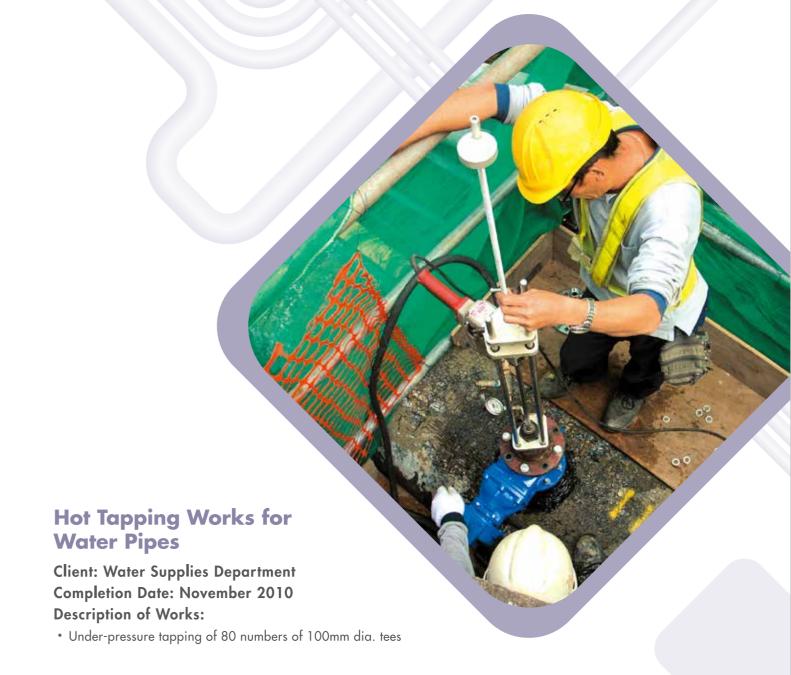
• 在大埔半春園與山塘新村之間敷設長約2.1公里、直徑為600毫米的食水管

• 包括在大埔河底進行100米長的無坑挖掘









帶壓水管安裝分支工程

客戶:水務署

完成日期:2010年11月

工程描述:

• 在帶壓水管上安裝80個直徑100毫米的分支



Seawater Cooling Mains from Edinburgh Pump House to Murray Building - 1037EM07

Client: Electrical & Mechanical Services Department Completion Date: January 2011 **Description of Works:**

- · Replacement and rehabilitation of seawater cooling mains from 100mm to 800mm diameter
- Replacement of 600m long cooling water mains
- Rehabilitation of 400m long cooling water mains
- Open trench laying of 1700m long cooling water mains

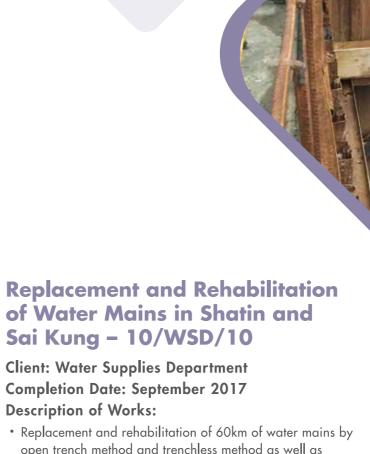
修復和更換由愛丁堡廣場至美利大厦之 地下海水冷卻管道 - 1037EM07

客戶:機電工程處 完成日期:2011年1月

工程描述:

- 修復和更換直徑100至800毫米的地下冷卻管道
- 更換600米地下冷卻管道
- 修復400米地下冷卻管道
- 鋪設1700米地下冷卻管道





open trench method and trenchless method as well as sacrificial anode cathodic protection system

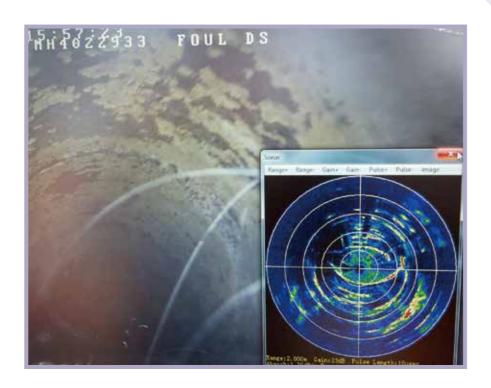
沙田和西貢區水管更換及修復工程 - 10/WSD/10

客戶:水務署

完成日期: 2017年9月

工程描述:

• 使用開挖和非開挖的方法,以及陰極保護系統,更換及修 復60公里的水管





Client: Drainage Services Department Completion Date: December 2017 Description of Works:

- Condition survey for 21km of existing underground sewers, box culverts and manholes on Hong Kong Island, in Kowloon and the New Territories
- Non-man entry remote operation vehicle using CCTV and sonar survey technology

地下污水渠狀況管檢測 - DC/2015/03

客戶: 渠務署

完成日期:2017年12月

工程描述:

- 探測現有香港島,九龍及新界地區21公里的地下水渠及沙井 的狀況
- 使用配備閉路電視和聲納設備的遙控車船,進行無人進渠 探測







Client: The Hong Kong and China Gas Company Limited Completion Date: December 2017 Description of Works:

 Installation of 1.7km of fibre optic cable inside existing submarine gas main from Cha Kwo Ling to Quarry Bay

煤氣管內光纖安裝工程

客戶:香港中華煤氣有限公司 完成日期:2017年12月

工程描述:

• 在茶果嶺至鰂魚涌現有海底煤氣管內安裝1.7公里長的光纖





Term Contract for Waterworks - Lantau and The Outlying Islands 2017 - 2020

Client: Water Supplies Department
Estimated Completion Date: November 2020
Description of Works:

• Replacement, emergency repair and maintenance of water mains and associated facilities

2017年至2020年 大嶼山及離島區水務定期合約工程

客戶:水務署

預計完成日期:2020年11月

工程描述:

• 水管及水務設施緊急維修及定期修葺工程



Construction and Maintenance of 5 LPG Filling Stations

Client: ECO Environmental Investments Limited
Completion Date: December 2001
Description of Works:

- Project management
- Electrical installation
- Fire services and gas detection system
- · Plumbing and drainage
- LPG system

安裝及保養5座石油氣加氣站

客戶:易高環保投資有限公司 完成日期:2001年12月

工程描述:

- 項目管理
- 電氣工程
- 消防及氣體檢測系統
- 給排水工程
- 石油氣系統



Building Services for Grand Waterfront

Client: The Hong Kong and China Gas Company Limited Completion Date: June 2007 Description of Works:

Facilities for five 60-storey residential buildings:

- MVAC installation
- Electrical system installation
- Plumbing and drainage installation
- Fire services installation

樓宇設備安裝工程 - 翔龍灣廣場

客戶:香港中華煤氣有限公司 完成日期:2007年6月

工程描述:

5座60層高住宅大樓的樓宇設備:

- 空調及通風工程
- 電氣工程
- 給排水工程
- 消防工程





Electrical Installation for Manulife Financial Centre

Client: Henderson Land Development Company Limited Completion Date: December 2008

Description of Works:

• Electrical and ELV installation for two 19-storey office towers

電氣安裝 - 宏利金融中心

客戶:恒基兆業地產有限公司 完成日期:2008年12月

工程描述:

• 兩座19層高辦公大樓的電氣及弱電安装









Client: The Hong Kong and China Gas Company Limited Completion Date: December 2015 Description of Works:

• Demolition of the No. 2 Gasholder at Ma Tau Kok Depot

土爪灣馬頭角廠房 2號煤氣儲氣鼓拆卸工程

客戶:香港中華煤氣有限公司 完成日期:2015年12月

工程描述:

• 拆卸位於土爪灣馬頭角廠房的2號煤氣儲氣鼓









Client: Manulife

Completion Date: March 2016

Description of Works:

 MVAC and Electrical Installation for a 30-storey office tower block



客戶:宏利

完成日期: 2016年3月

工程描述:

• 1座30層高辦工大樓的空調、通風和電氣安裝











Electrical Installation for Double Cove – Phase 2 to 5

Client: Henderson Land Development Company Limited

Completion Date: February 2017
Description of Works:

• Electrical installation for 17 residential tower blocks

電氣安裝

迎海 - 二至五期

客戶:恒基兆業地產有限公司 完成日期:2017年2月

工程描述:

• 共17座住宅大樓的電氣安裝



MVAC & Fire Services Installation for Wellesley – 23 Robinson Road

Client: Join Profit Development Limited Estimated Completion Date: October 2018 Description of Works:

 MVAC and Fire Services Installation for a 30-storey residential tower block

空調、通風和消防安裝 帝匯豪庭 - 羅便臣道23號

客戶:仲富發展

預計完成日期:2018年10月

工程描述:

• 1座30層高豪華住宅大樓的空調、通風和消防安裝









Electrical Installation for Eden Manor – Fanling Golf Club

Client: Henderson Land Development Company Limited Estimated Completion Date: May 2019 Description of Works:

• Electrical installation for eight 25-storey residential tower blocks and 25 houses

電氣安裝 粉嶺哥爾夫 - 御苑

客戶:恒基兆業地產有限公司 預計完成日期:2019年5月

工程描述:

• 8座25層高住宅大樓和25間獨立屋的電氣安裝

Towngas Pipe Laying Projects

Towngas pipe laying projects including sales, diversion, supplying network extension, replacement and reinforcement jobs, etc.

Client: The Hong Kong and China Gas Company Limited

煤氣管道鋪設項目

聚乙烯管道鋪設項目,包括新增客戶供氣管道、管道改線、網絡伸延、舊等更換及加強供氣網絡等。

客戶:香港中華煤氣有限公司







Landfill Gas Pipe Laying Projects

Landfill gas pipe laying projects for HKCG including Shuen Wan Landfill Site, North East New Territories (NENT) Landfill Site and South East New Territories (SENT) Landfill site
Client: The Hong Kong and China Gas Company Limited

堆填區沼氣管道鋪設項目

在多個堆填區進行沼氣管道鋪設項目,包括大埔船灣 堆填區、新界東北堆填區和新界東南堆填區等 客戶:香港中華煤氣有限公司







