





COMPLETED PROJECTS

THE LINE JATUJAK - MOCHIT











THE LINE JATUJAK - MOCHIT

Location: @Phaholyothin Road, Bangkok, Thailand Owner: Sansiri Public Company Limited

Project Summary: High-rise condominium 43 storey with construction area is estimated at 55,000 Sq.m. with 800 units in total.

W&A Responsibility:

- Mechanical, Electrical and Plumbing System Design

Project Information

The latest condominium in the heart of the city. Open up your viewpoint 360 degrees across the greenery of Suan Wachira Benchathat Park. Amidst the soothing nature that ensures true relaxation Located in the vicinity of BTS Morchit Station and MRT Chatuchak Station. Live life in the fast lane at its fullest.

BANGKOK MARRIOTT QUEEN'S PARK











BANGKOK MARRIOTT QUEEN'S PARK

Location: @Sukhumvit, Bangkok, Thailand

Owner: TCC Hotel Group

Project Summary: Rebranded to Marriott Hotel, Building consist of 1,400 rooms, Bathroom, F&B, SAA and Etc. with construction area is estimated at 140,000 Sq.m.

W&A Responsibility:

- Mechanical, Electrical and Plumbing System Design
- Civil and Structural Design

Project Information

Bangkok Marriott Marquis Queen's Park is 5-star hotel rooms and suites, featuring contemporary amenities and beautiful Thai-inspired elements. Treat yourself to a diversity of restaurants, showcasing delicious Chinese, Japanese and Thai cuisine in stylishly designed venues. With panoramic views of Bangkok city center.

CENTRAL PLAZA RAYONG











CENTRAL PLAZA RAYONG

Location: @Rayong, Thailand

Owner: Central Pattana Public Company Limited

Project Summary: The Shopping Complexes with Construction

area is estimated at 135,000 Sq.m.

W&A Responsibility:

- Mechanical, Electrical and Plumbing System Design

Project Information

Central Plaza Rayong, CPN's 26th shopping mall with investment value of over THB 3.2 billion, is the biggest and most modern shopping mall of the province. The architecture and landscape is inspired by local arts, culture and literature by Phra Sunthorn Phu, Thailand's best-known royal poet who was born in Rayong.

THE STREET RATCHADA











THE STREET RATCHADA

Location: @Ratchada, Bangkok, Thailand Owner: Variety 5 Company Limited

Project Summary: The shopping complex with Construction area

is estimated at 47,000 Sq.m. W&A Responsibility:

- Mechanical, Electrical and Plumbing System Design

Project Information

The Street Ratchada, Experience the new street mall in the heart of Ratchada had been developed under the unique concept of "SIP. WALK. TALK. SHARE", in order to serve the new lifestyle of new-generation consumers, which is not limited by time.

THE PRODIGY







THE PRODIGY

Location: @Petchakasem 62 Road, Bangkok, Thailand Owner: GDT Property Company Limited Project Summary: High-rise Condominium, Building A: 31 Storeys, 474 units / Building B: 33 Storeys, 799 units

Building A: 31 Storeys, 474 units / Building B: 33 Storeys, 799 units 1,273 units in total. Construction area is estimated at 70,000 Sq.m. **W&A Responsibility:**

- Mechanical, Electrical and Plumbing System Design
- Civil and Structural Design

Project Information

The Street Ratchada, Experience the new street mall in the heart of Ratchada had been developed under the unique concept of "SIP. WALK. TALK. SHARE", in order to serve the new lifestyle of new-generation consumers, which is not limited by time.

CHIVASOM (RENOVATION)











CHIVASOM (RENOVATION)

Location: @Hua Hin, Prachuab Khirikhan, Thailand

Owner: Chivasom

Project Summary: Renovation of hotel 3,000 Sq.m.

W&A Responsibility: - Civil and Structural Design



BELLA COSTA

Location: @Hua Hin, Prachuap Khiri Khan, Thailand Owner: Property Perfect Public Limited Company Project Summary: 6 Buildings and 3 Villas with Construction area of 23,000 sq.m. W&A Responsibility: Project/Construction Management

THE PRIVACY CONDO

Location: @Sena Nikhom, Bangkok, Thailand Owner: Pruksa Real Estate Public Company Limited Project Summary: 8 Storey Condominium, 2 Buildings with Construction area of 15,000 Sq.m. W&A Responsibility: Project/Construction Management





PLUM CONDO (PHASE 1)

Location: @Laemchabang, Chonburi, Thailand
Owner: Pruksa Real Estate Public Company Limited
Project Summary: 8 Storey Condominium, 2 Buildings with Construction
area of 15,000 Sq.m.
W&A Responsibility:
Project/Construction Management

SIAM ORIENTAL HOTEL









SIAM ORIENTAL HOTEL

Location: @Hat-Yai, Songkla, Thailand Owner: Siam Southern Company Limited

Project Summary: 17 Storeys Hotel Building with Construction

area of 18,000 Sq.m. W&A Responsibility:

- Project/Construction Management

Project Information

Siam Oriental Hotel the total of 215 modern style rooms with five categories on offer. All rooms are equipped with full of facilities and amenities. There are non-smoking rooms and rooms for disable persons. Located in the heart of the commercial and shopping. The city with the Airport facilities. Links to Bangkok, and the Malaysian border. With meeting rooms that can accommodate up to 700 people in attendance, it is the ideal place for. Organizing business meetings and banquets every social category.

UNDERCONSTRUCTION PROJECTS

THE LINE RATCHATHEWI









THE LINE RATCHATHEWI

Location: @New Petchburi Road, Bangkok, Thailand

Owner: BTS Sansiri Holding One Limited

Project Summary: 38 Storeys High-rise condominium with 231 units

in total. Construction area is estimated 28,000 Sq.m.

W&A Responsibility:

- Mechanical, Electrical and Plumbing System Design
- Civil and Structural Design

Project Information

THE CENTRE OF EVERYTHING

The line Ratchathewi, This is the center of outstanding in every aspect. The potential location that attracts the future opportunity is your happiness. Special designed space with convenient functions.

ACTIVITIES



On August 25-27, 2017, W and Associates Group had our internal seminar activity at Chantraburi Province. The major objectives of this activity was create good internal relationship between our teams by achieving many teamwork activities, generating appropriate Demonstration Unit, Kungkrabaen bay, and promoting our teams' happiness by having warm welcome dinner with fancy dressing competition.

Introduction of District Cooling (DCS):

Nowadays, the energy efficiency in any solutions is become one of the imperative approach for various designs especially in air conditioning systems in any type of buildings. District cooling design, which is one of the best solutions for large mixed-use project delivers many beneficial aspects such as energy-efficient, cost-effective, and environmental friendly. Moreover, because of centralizing cooling production as district cooling, the system has already provided diverse benefits, which include reduction of maintenance cost, deduction of cooling generating plant space, and economizing the installed capacity.

The District Cooling is:

Generally, the district cooling system, DCS, is the large central cooling plant, which generates enormous volume of chilled water and deliver to multiple buildings in its coverage areas. The piping distribution network is usually installed underground in order to connects between central plant and buildings. The individual building will purchase chilled water from the DCS plant based on its operations without installing their own chiller plants. Each building requires their own the secondary loop including secondary pumps, internal building distribution piping network, and air terminal units so that they can use chilled water from DCS central plant as their requirement. Comparing with traditional air-cooled and individual water-cooled with cooling tower systems, the DCS can deduct the energy consuming around 35%-20% respectively.

The Major of District Cooling Components:

Practically, the DCS is comprised of 3 major components, Central Chiller Plant, Distribution Network, and Energy Transfer Station.

Central Chiller Plant:

Normally, chilled water at the central chiller plant is generated by using multiple large and efficient electric c hillers, absorption chillers, or free cooling from deep lakes, rivers, or oceans. When the DCS combines with multiple chillers, the system will take advantage of the economy of scale and cooling generating diversity between buildings in the district area. Moreover, the central DCS plant has already included chilled water pumps so as to deliver chilled water from main plant to other buildings called primary loop.

Distribution Network:

DCS distributes chilled water from cooling source to individual energy transfer station by using piping network so that the system can extract heat from individual building and reject them at the main plant. This chilled water circulation results from distribution pumps in the DCS plant. Most of the cases, the distribution network is usually installed in underground route line.

Energy Transfer Station:

The energy transfer station is the user station which is installed in an individual building. In each energy transfer station, it has devices called Heat exchangers, which play an important role in transferring heat between primary loop from DCS and secondary loop from building air-conditioning systems. The secondary loop can be equipped with air terminal equipment such as fan coil units or air handling units, or utilized with multiple heat exchangers depending on design techniques.

district cooling sys/dcs.html

CONTACT US



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